Connecting via Winsock to STN

Welcome to STN International! Enter x:x

FILE 'HOME' ENTERED AT 11:17:54 ON 14 NOV 2007

=> file reg

Uploading C:\Program Files\Stnexp\Queries\4844037.str





## Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:CLASS 22:Atom 23:CLASS

Page 1

L1 STRUCTURE UPLOADED

=> s quinoline

L2 398380 QUINOLINE

=> d rsd

L2 ANSWER 1 OF 398380 REGISTRY COPYRIGHT 2007 ACS on STN

Ring System Data

Analysis EA	Sequence ES	the Rings SZ	Ring System   Formula   RF	Ring  Identifier   RID	Count		
C3	C3   C3	3   3	:	1.13.1	l in CM		
C5N	NC5	6	C5N	46.156.1	1 in CM		
C5N-C6	NC5-C6	6-6	C9N	591.79.40	l in CM		

=> d 1 all

L2 ANSWER 1 OF 398380 REGISTRY COPYRIGHT 2007 ACS on STN

RN 953089-77-5 REGISTRY

ED Entered STN: 12 Nov 2007

CN Butanedioic acid, 2-hydroxy-, compd. with 7-[(3S,5S)-3-amino-5-methyl-1-piperidinyl]-1-cyclopropyl-1,4-dihydro-8-methoxy-4-oxo-3-quinolinecarboxylic acid, hydrate (1:1:?) (CA INDEX NAME)

FS STEREOSEARCH

MF C20 H25 N3 O4 . C4 H6 O5 .  $\times$  H2 O

SR CA

LC STN Files: CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)

# Ring System Data

Analysis EA	Sequence   ES	the Rings	Ring System Formula RF	Identifier RID	Count		
C3	+=======   C3 	3   3	!	1.13.1 	1 in CM  1		
C5N	NC5	6 	C5N 	46.156.1	1 in CM  1		
C5N-C6	NC5-C6	6-6 	C9N	591.79.40	l in CM		

CM 1

CRN 378746-64-6 CMF C20 H25 N3 O4

# Absolute stereochemistry.

CM 2

CRN 6915-15-7. CMF C4 H6 O5

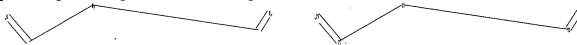
$$\begin{array}{c} \text{OH} \\ | \\ \text{HO}_2\text{C---} \text{CH----} \text{CH}_2\text{----} \text{CO}_2\text{H} \end{array}$$

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 591/rid

3265689 591/RID L3

Uploading C:\Program Files\Stnexp\Queries\3844037.str









chain nodes : 21 22 23 24 25

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

chain bonds :

21-25 21-23 22-24 22-23

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14

14-15 15-16 15-17 16-20 17-18 18-19 19-20

exact/norm bonds :

21-25 21-23 22-24 22-23

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14 14-15 15-16 15-17 16-20 17-18 18-19 19-20

isolated ring systems :

containing 1 : 11 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom

20:Atom 21:CLASS 22:CLASS 23:Atom 24:CLASS 25:CLASS

STRUCTURE UPLOADED L4

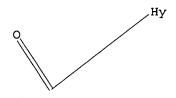
Uploading C:\Program Files\Stnexp\Queries\2844037.str

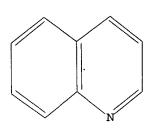
# Match level :

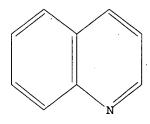
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:CLASS 22:CLASS 23:CLASS 24:Atom 25:CLASS 26:CLASS

#### L5 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR







Structure attributes must be viewed using STN Express query preparation.

=> s 11 sub=13 full

FULL SUBSET SEARCH INITIATED 11:21:08 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 22962 TO ITERATE

100.0% PROCESSED 22962 ITERATIONS 738 ANSWERS

SEARCH TIME: 00.00.01

L7. 738 SEA SUB=L3 SSS FUL L1

=> file ca

=> s 17

L8 221 L7

=> s 18 and telomeras?

8228 TELOMERAS?

L9 6 L8 AND TELOMERAS?

=> d ibib abs fhitstr 1-6

SOURCE:

CORPORATE SOURCE:

ANSWER 1 OF 6 CA COPYRIGHT 2007 ACS on STN

143:417203 CA ACCESSION NUMBER:

Preferential binding of a G-quadruplex ligand to human TITLE:

chromosome ends

AUTHOR(S): Granotier, Christine; Pennarun, Gaelle; Riou, Lydia;

Hoffschir, Francoise; Gauthier, Laurent R.; De Cian,

Anne; Gomez, Dennis; Mandine, Eliane; Riou,

Jean-Francois; Mergny, Jean-Louis; Mailliet, Patrick;

Dutrillaux, Bernard; Boussin, Francois D.

LRP, DRR, CEA, Fontenay-aux-Roses, 92265, Fr.

Nucleic Acids Research (2005), 33(13), 4182-4190

CODEN: NARHAD; ISSN: 0305-1048

Oxford University Press PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE:

English The G-overhangs of telomeres are thought to adopt particular AB

conformations, such as T-loops or G-quadruplexes. It has been suggested that G-quadruplex structures could be stabilized by specific ligands in a new approach to cancer treatment consisting in inhibition of telomerase, an enzyme involved in telomere maintenance and cell immortality. Although the formation of G-quadruplexes was demonstrated in vitro many years ago, it has not been definitively demonstrated in living human cells. We therefore investigated the chromosomal binding of a tritiated G-quadruplex ligand, 3H-360A (2,6-N,N'-methyl-quinolinio-3-yl)pyridine dicarboxamide [methyl-3H]. We verified the in vitro selectivity of 3H-360A for G-quadruplex structures by equilibrium dialysis. We then showed by binding expts. with human genomic DNA that 3H-360A has a very potent selectivity toward G-quadruplex structures of the telomeric 3'-overhang. Finally, we performed autoradiog. of metaphase spreads from cells cultured with 3H-360A. We found that 3H-360A was preferentially bound to chromosome terminal regions of both human normal (peripheral blood lymphocytes) and tumor cells (T98G and CEM1301). In conclusion, our results provide evidence that a specific G-quadruplex liqand interacts with the terminal ends of human chromosomes. They support the hypothesis that G-quadruplex ligands induce and/or stabilize G-quadruplex structures at telomeres of human cells.

868159-44-8 IT

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(preferential binding of G-quadruplex ligand to chromosome ends in human tumor and normal cells)

868159-44-8 CA RN

Quinolinium, 3,3'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl-, diiodide, labeled with tritium (9CI) (CA INDEX NAME)

●2 I-

REFERENCE COUNT:

THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 6 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

143:53056 CA

TITLE:

Apoptosis related to telomere instability and cell cycle alterations in human glioma cells treated by new

highly selective G-quadruplex ligands

AUTHOR(S):

Pennarun, Gaelle; Granotier, Christine; Gauthier, Laurent R.; Gomez, Dennis; Hoffschir, Francoise; Mandine, Eliane; Riou, Jean-Francois; Mergny, Jean-Louis; Mailliet, Patrick; Boussin, Francois D.

CORPORATE SOURCE:

Laboratoire de Radiopathologie, DSV/DRR, CEA,

Fontenay-aux-Roses, 92265, Fr.

SOURCE:

Oncogene (2005), 24(18), 2917-2928

CODEN: ONCNES; ISSN: 0950-9232

PUBLISHER:

Nature Publishing Group

DOCUMENT TYPE:

Journal English

LANGUAGE:

Telomerase represents a relevant target for cancer therapy. AB Mols. able to stabilize the G-quadruplex (G4), a structure adopted by the

3'-overhang of telomeres, are thought to inhibit telomerase by blocking its access to telomeres. We investigated the cellular effects of four new 2,6-pyridine-dicarboxamide derivs. displaying strong selectivity for G4 structures and strong inhibition of telomerase in in vitro assays. These compds. inhibited cell proliferation at very low concns. and then induced a massive apoptosis within a few days in a dose-dependent manner in cultures of three telomerase-pos. glioma cell lines, T98G, CB193 and U118-MG. They had also antiproliferative effects in SAOS-2, a cell line in which telomere maintenance involves an alternative lengthening of telomeres (ALT) mechanism. We show that apoptosis was preceded by multiple alterations of the cell cycle: activation of S-phase checkpoints, dramatic increase of metaphase duration and cytokinesis defects. These effects were not associated with telomere shortening, but they were directly related to telomere instability involving telomere end fusion and anaphase bridge formation. Pyridine-based G-quadruplex ligands are therefore promising agents for the treatment of various tumors including malignant gliomas.

IT 737763-35-8, 307A

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(apoptosis related to telomere instability and cell cycle alterations in human glioma cells treated by selective G-quadruplex ligands)

RN

737763-35-8 CA Quinolinium, 1-methyl-3-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2pyridinyl]carbonyl]amino]-, iodide (1:2) (CA INDEX NAME)

●2 T-

REFERENCE COUNT:

THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 6 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

142:1569 CA

TITLE:

Stabilization of the c-myc gene promoter quadruplex by

specific ligands' inhibitors of telomerase

AUTHOR (S):

Lemarteleur, Thibault; Gomez, Dennis; Paterski, Rajaa;

Mandine, Eliane; Mailliet, Patrick; Riou,

Jean-Francois

CORPORATE SOURCE:

Laboratoire d'Onco-Pharmacologie, UFR de Pharmacie, Universite de Reims Champagne-Ardenne, Reims, 51096,

SOURCE:

Biochemical and Biophysical Research Communications

(2004), 323(3), 802-808

CODEN: BBRCA9; ISSN: 0006-291X

PUBLISHER:

Elsevier Journal

DOCUMENT TYPE: LANGUAGE: English

AB A parallel G-quadruplex structure was recently identified in the NHE III1 element of the c-myc gene promoter that functioned as a transcriptional repressor. Different series of telomeric G-quadruplex interacting ligands reported to block telomerase activity were evaluated in a new PCR stop assay on the c-myc quadruplex (Pu22myc). Results indicated that the cationic porphyrin TMPyP4 previously described to stabilize c-myc quadruplex and to cause transcription inhibition efficiently inhibited the assay but with a narrow selectivity when parallel expts. were performed with an oligonucleotide (Pu22mu) containing mutations in the quanine repeat which is unable to form a quadruplex. Other ligands presented potent inhibitory properties with IC50 in the submicromolar range. 307A, a new 2,6-pyridin-dicarboxamide derivative was found to present the highest selectivity as compared to Pu22mu oligonucleotide (>90-fold). Comparison with telomeric G-quadruplex using TRAP-G4 and PCR stop assays also indicated that ligands 307A, telomestatin, and TMPyP4 are equipotent against both c-myc and telomeric sequences while other ligands displayed some partial selectivity (2- to 6-fold) towards one of these sequences. This work provides evidence that G-quadruplex ligands reported as telomerase inhibitors efficiently stabilized c-myc promoter intramol. quadruplex and may also potentially be used to inhibit c-myc gene transcription in tumor cells.

IT 737763-35-8, 307A

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (stabilization of c-myc gene promoter quadruplex by specific ligands' inhibitors of telomerase)

RN737763-35-8 CA

Quinolinium, 1-methyl-3-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2-CN pyridinyl]carbonyl]amino]-, iodide (1:2) (CA INDEX NAME)

●2 T-

REFERENCE COUNT:

40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 6 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

141:185084 CA

TITLE:

G-quadruplex-binding quaternary nitrogen-containing heterocyclic compounds, their preparation, and their

use as antitumor agents

INVENTOR(S):

Hittinger, Augustin; Caulfield, Thomas; Maillet, Patrick; Bouchard, Herve; Mandine, Eliane; Belmokhtar,

Chafke; Mergny, Jean Louis; Guittat, Lionel; Riou,

Jean Francois; Gomez, Dennis

PATENT ASSIGNEE(S):

Aventis Pharma S. A., Fr.; Centre National de la

Recherche Scientifique CNRS; Museum National d'Histoire Naturelle; Institut Curie; Commissariat a l'Energie Atomique; Universite de Reims Champagne

Ardenne

SOURCE:

Fr. Demande, 57 pp.

CODEN: FRXXBL

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.			KIND DATE			APF	LICAT	ION I	DATE									
	FR 2850970								FR	2003-		20030207							
	28		•			B1		2006			20 11	2004	2107	E 2		2	0040	205	
				53				2004				2004-							
	4 25					A1		2004				2004-					0040		
WC	20	04(	720	27		A2		2004	0826		WO	2004-	FR26	0		2	0040	205	
· WC	20	040	720	27		<b>A3</b>		2004	0923										
	W	:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
												Z, EC,							
												JP,							
												, MK,							
	ם	TA7 •										, SZ,							
	10	"										, FR,							
											ВГ	r, BJ,	CF,	CG,	CI,	CM,	GA,	GIV,	
			GQ,	GW,	•	•		SN,								_			
E			398											20040205					
	R	:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹, IT,	LI,	LU,	ΝL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FI	RO,	MK,	CY,	ΑI	TR,	BG,	CZ,	EE,	HU,	SK		
BF	20	040				A 20060221													
						Т		2006	0817		JΡ	2006-	5021	20040205					
												2004-				0040	206		
	US 2007232572 MX 2005PA07648								2005-										
*						Α.		2000	1213			2003							
PRIORIT	LIA	PPI	_11	TMFO	• •												0030		
												2003-				-			
			/ a \					1 4 1	1050	0.4	WO	2004-	rK26	U		W 2	0040	205	
OTHER C	COLID.	CH	(5) •			MΔP	ΡΔΤ	141.	185()	H 4									

OTHER SOURCE(S):

MARPAT 141:185084

GΙ

- AB The invention provides G-quadruplex-binding quaternary nitrogen-containing heterocyclic compds. for use as antitumor agents in humans. Preparation of e.g. 2,6-pyridine dicarboxylic acid bis[(1-methylquinolin-6-yl)amide] diodide (I) is described. The compds of the invention have telomerase-inhibitory activity.
- TT 737763-27-8P
  RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
   (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (Uses)

(G-quadruplex-binding quaternary nitrogen-containing heterocyclic compound preparation and use as antitumor agents)

RN 737763-27-8 CA

CN Quinolinium, 6,6'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl-, diiodide (9CI) (CA INDEX NAME)

•2 I-

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 6 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 138:24646 CA

TITLE: Heterocyclic diamides and related compounds as

telomerase inhibitors

INVENTOR (S): Bouchard, Herve; Hittinger, Augustin

PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr. PCT Int. Appl., 65 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA									APPLICATION NO.							DATE			
WO	2002	2002096903						WO 2002-FR1767											
WO	2002	0969	03		<b>A</b> 3		2003	0417											
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB	3, B	ß,	BR,	BY,	ΒZ,	CA	, CH	, CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	:, E	Œ,	ES,	FI,	GB,	GD	, GE	, GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	:, K	Œ,	ΚP,	KR,	ΚŻ,	LC	, LK	, LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	1, M	IW,	MX,	MZ,	NO,	NZ	, OM	, PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK	t, s	ßL,	TJ,	TM,	TN,	TR	, TT	TZ,	
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW	1								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, T	Z,	ÜĠ,	ZM,	ZW,	ΑM	, AZ	, BY,	
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	CH	I, C	Υ,	DE,	DK,	ES,	FI	, FR	GB,	
		GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR	ł, B	BF,	ВJ,	CF,	CG,	CI	, CM	GA,	
		GN,	GQ,	GW,	ML,	MR,	NE,												
FR	2825	090			A1		2002	1129		FR 2001-6909							2001	0528	
FR	2825	090			B1		2003	0801											
AU	2002	3142	52		A1		2002	1209		AU	200	2-3	3142	52			20020	)527	
EP	1401	833			A2		2004	0331		ΕP	200	2-1	7408	14			20020	)527	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	2, I	Τ,	LI,	LU,	NL,	SE	, MC	PT,	
		•	,	•	•		RO,	•	•		•								
JP	2004	5340	46		$\mathbf{T}$		2004												
	2004						2004			US	200	3 - 1	7212	10			2003	1125	
	6995						2006												
	2006				A1		2006	0907					2223				20050		
PRIORIT	Y APP	LN.	INFO	. :													2001		
																	20020		
													FR17				20020		
										US	200	3 - 1	7212	10		A3	2003	1125	
OTHER S	OTHER SOURCE(S):				MAR	ARPAT 138:2464													

Heterocyclic diamides and related compds. were prepared for use as ΑB telomerase inhibitors. Thus, 2,5-thiophenedicarboxylic acid was treated with 6-amino-4-dimethylamino-2-methylquinoline to give the diamide I which had a fluorescence Tm of 10.5 at 1 mM and an IC50 for inhibition of telomerase of 0.9  $\mu M$ .

IT 477219-39-9P

GI

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(heterocyclic diamides and related compds. as telomerase inhibitors)  $% \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2$ 

RN 477219-39-9 CA

CN 2,5-Thiophenedicarboxamide, N,N'-bis(4-methoxy-2-methyl-6-quinolinyl)-(9CI) (CA INDEX NAME)

ANSWER 6 OF 6 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

137:263071 CA

TITLE:

Preparation of trisubstituted 2,4,6-

triamino[1,3,5]triazines as anti-telomerase

agents

INVENTOR(S):

Mailliet, Patrick; Laoui, Abdelazize; Riou, Jean-Francois; Doerflinger, Gilles; Mergny, Jean-Louis; Hamy, Francois; Caulfield, Thomas

Aventis Pharma S.A., Fr.

PATENT ASSIGNEE(S):

PCT Int. Appl., 208 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

									APPLICATION NO.										
							WO 2002-FR1005												
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,		
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,		
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NO,	NZ,	OM,	PH,		
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK	, SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,		
		UΑ,	ŬĠ,	UΖ,	VN,	YU,	ZA,	ZM,	ZW										
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,		
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE	;, IT,	LU,	MC,	NL,	PT,	SE,	TR,		
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ	), GW,	ML,	MR,	ΝE,	SN,	TD,	TG		
	R 2822								FR 2001-3916										
									CA 2002-2442012										
										AU 2002-251140						20020322			
A	J 2002	2511	40		B2	32 20070315													
E	P 1373	252			A1		2.004	0102		ΕP	2002-	7200	68		2	0020	322		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	!, IT,	LI,	LU,	NL,	SE,	MC,	PT,		
											, TR								
	P 2004										2002-								
U	3 2003	0879	31		A1		2003	0508	1	US	2002-	1038	83		2	0020	325		
	5 6887	873			B2		2005	0503											
	X 2003																		
	S 200 <sub>.</sub> 5						2005	0331											
PRIORI	ry Apr	LN.	INFO	. :							2001-								
											2001-								
											2001-								
											2002-					0020			
							1	US	2002-	1038	83		A3 2	0020	325				

OTHER SOURCE(S):

MARPAT 137:263071

GΙ

AB Title compds. I [A = XR1R2; X = N, O, S, alkyl radical; R1-2 = H, alkyl, heterocyclyl, etc.; R3-3' = H, alkyl, isoquinolinyl, quinolinyl, etc.; Ar1-2 = (un)substituted Ph, etc., and derivs. thereof] were prepared For instance, 2,4-bis[(4-(dimethylamino)-2-methylquinolin-6-yl)amino]-6-chloro[1,3,5]triazine (prior art) was reacted with N,N-dimethyl-1,3-propanediamine in DMF with K2CO3 for 15 h at 100° to afford II. Examples include evaluation of all compds. of the invention for telomerase activity. I are anti-cancer agents.

IT 462649-74-7P, 2-[[4-Amino-2-methylquinolin-6-yl]amino]-4-[[4-amino-2-methylquinolin-6-yl]amino]-6-[4-[[furan-2-yl]carbonyl]piperazinyl]triazi ne

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of trisubstituted 2,4,6-triamino[1,3,5]triazines as antitelomerase agents)

RN 462649-74-7 CA

CN Piperazine, 1-[4,6-bis[(4-amino-2-methyl-6-quinolinyl)amino]-1,3,5-triazin-2-yl]-4-(2-furanylcarbonyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs fhitstr 1-15

```
L12 ANSWER 1 OF 15 CA COPYRIGHT 2007 ACS on STN
                         147:235488 CA
ACCESSION NUMBER:
                         Development and biological assessment of fully
TITLE:
                         water-soluble helical aromatic amide foldamers
AUTHOR (S):
                         Gillies, Eliabeth R.; Deiss, Frederique; Staedel,
                         Cathy; Schmitter, Jean-Marie; Huc, Ivan
                         Institut Europeen de Chimie et Biologie, Universite
CORPORATE SOURCE:
                         Bordeaux 1-CNRS UMR5248, Pessac, 33607, Fr.
                         Angewandte Chemie, International Edition (2007),
SOURCE:
                         46(22), 4081-4084
                         CODEN: ACIEF5; ISSN: 1433-7851
                         Wiley-VCH Verlag GmbH & Co. KGaA
PUBLISHER:
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
                         CASREACT 147:235488
OTHER SOURCE(S):
     The authors have prepared water-soluble oligoamides of 8-amino-2-
AB
     quinolinecarboxylic acid as amphipathic helixes bearing both hydrophilic
     and hydrophobic residues. These peptidomimetic oligomers are equipped
     with multiple cationic side chains to improve their hydrosoly., and they
     are structurally able to assist in processes such as DNA
     transfection and membrane transport. The cytotoxicity of these oligomers
     were tested in HeLa cells. In addition, the oligomers were examined in a
     DNA transfection assay.
     945496-51-5P
     RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
     BIOL (Biological study); PREP (Preparation)
        (preparation of aminoquinolinecarboxylic acid-based oligomers as
water-soluble
        helical peptidomimetic foldamers, and evaluation of their biol.
        activity in cell cytotoxicity and DNA transfection assays)
     945496-51-5 CA
RN
     2-Quinolinecarboxylic acid, 4-(3-aminopropoxy)-8-[[[4-(3-aminopropoxy)-8-
CN
     [[[4-(3-aminopropoxy)-8-[[[4-(3-aminopropoxy)-8-[[[4-(3-aminopropoxy)-8-
     [[[4-(3-aminopropoxy)-8-[[[4-(3-aminopropoxy)-8-[[[4-(3-aminopropoxy)-8-
     nitro-2-quinoliny1]carbony1]amino]-2-quinoliny1]carbony1]amino]-2-
     quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
     quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
     quinolinyl]carbonyl]amino]-, 2,2,2-trifluoroacetate (1:8)
                                                                (CA INDEX NAME)
     CM
          1
     CRN 945496-50-4
     CMF C104 H104 N24 O19
```

# PAGE 1-A

PAGE 2-A
$$\bigcirc \qquad C-R$$

$$H_2N-(CH_2)_3-O$$
 $H_2N-(CH_2)_3-O$ 
 $NH$ 
 $NH$ 
 $NH$ 
 $NH$ 
 $NO_2$ 
 $H_2N-(CH_2)_3-O$ 
 $H_2N-(CH_2)_3-O$ 

CM 2

CRN 76-05-1 CMF C2 H F3 O2

REFERENCE COUNT:

69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

147:206058 CA

TITLE:

Quadruplex ligands may act as molecular chaperones for

tetramolecular quadruplex formation

AUTHOR (S):

De Cian, Anne; Mergny, Jean-Louis

CORPORATE SOURCE:

Laboratoire de Biophysique, Museum National d'Histoire

Naturelle USM 503, INSERM UR 565, CNRS UMR 5153,

Paris, 75231/05, Fr.

SOURCE:

Nucleic Acids Research (2007), 35(8), 2483-2493

CODEN: NARHAD; ISSN: 0305-1048

PUBLISHER:

Oxford University Press

Journal

DOCUMENT TYPE:

English LANGUAGE: AB

G-quadruplexes are a family of four-stranded DNA structures, stabilized by G-quartets, that form in the presence of monovalent cations. Efforts are currently being made to identify ligands that selectively bind to G-quadruplex motifs as these compds. may interfere with the telomere structure, telomere elongation/replication and proliferation of cancer cells. The kinetics of quadruplex-ligands interactions are poorly understood: it is not clear whether quadruplex ligands lock into the preformed structure (i.e. increase the lifetime of the structure by lowering the dissociation constant, koff) or whether ligands actively promote the formation of the complex and act as quadruplex chaperones by increasing the association constant, kon. We studied the effect of a selective quadruplex ligand, a bisquinolinium pyridine dicarboxamide compound called 360A, to distinguish these two possibilities. We demonstrated that, in addition to binding to and locking into preformed quadruplexes, this mol. acted as a chaperone for tetramol. complexes by acting on kon. This observation has implications for in vitro and in vivo applications of quadruplexes and should be taken into account when evaluating the cellular responses to these agents.

IT 794458-47-2

RL: BSU (Biological study, unclassified); BIOL (Biological study) (quadruplex ligands may act as mol. chaperones for tetramol. quadruplex DNA formation)

RN

794458-47-2 CA Quinolinium, 6,6'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl- (9CI) CN (CA INDEX NAME)

REFERENCE COUNT:

86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 146:353154 CA

Highly Efficient G-Quadruplex Recognition by TITLE:

Bisquinolinium Compounds

AUTHOR (S): De Cian, Anne; DeLemos, Elsa; Mergny, Jean-Louis;

Teulade-Fichou, Marie-Paule; Monchaud, David

Laboratoire de Chimie des Interactions Moleculaires, CORPORATE SOURCE:

CNRS UPR285, College de France, Paris, 75005, Fr.

SOURCE: Journal of the American Chemical Society (2007),

129(7), 1856-1857

CODEN: JACSAT; ISSN: 0002-7863

American Chemical Society PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 146:353154

Syntheses and telomeric G-quadruplex-DNA binding properties of novel bisquinolinium compds. are reported. This series exhibits remarkable efficiency both in terms of stabilization and selectivity, thus combining the performances of the most potent quadruplex binders reported so far. These bisquinolinium compds. then represent an ideal tradeoff between rapid synthetic access and efficient target recognition. The study also highlights important structural parameters that lead to the design of highly selective G-quadruplex binders.

TT 929895-43-2P

> RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(highly efficient G-quadruplex recognition by bisquinolinium compds.)

RN

929895-43-2 CA Quinolinium, 3,3'-[[2,2'-bipyridine]-6,6'-diylbis(carbonylimino)]bis[1-CN methyl-, 1,1,1-trifluoromethanesulfonate (1:2) (CA INDEX NAME)

CM 1

CRN 942936-73-4 CMF C32 H26 N6 O2

CM

CRN 37181-39-8 CMF C F3 O3 S

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

146:54935 CA

TITLE:

Modulation of cell proliferation and polyamine

metabolism in rat liver cell cultures by the iron

chelator O-trensox

AUTHOR (S):

Gaboriau, Francois; Laupen-Chassay, Cindy; Pasdeloup, Nicole; Pierre, Jean-Louis; Brissot, Pierre; Lescoat,

Gerard

CORPORATE SOURCE:

Inserm, U522, Hopital Pontchaillou, Rennes, F-35033,

Fr.

SOURCE:

BioMetals (2006), 19(6), 623-632

CODEN: BOMEEH; ISSN: 0966-0844

PUBLISHER:
DOCUMENT TYPE:

Springer Journal English

DOCUMENT TYPE: LANGUAGE:

AB The antiproliferative effects of the iron chelator O-trensox and the ornithine-decarboxylase (ODC) inhibitor alpha-difluoromethylornithine (DFMO) were characterized in the rat hepatoma cell line FAO, the rat liver epithelial cell line (RLEC), and the primary rat hepatocyte cultures stimulated by EGF. We observed that O-trensox and DFMO decreased cell viability and DNA replication in the 3 culture models. The cytostatic effect of O-trensox was correlated to a cytotoxicity, higher than for DFMO, and to a cell cycle arrest in GO/G1 or S phases. Moreover, O-trensox and DFMO decreased the intracellular concentration of spermidine in

the

3 models without changing significantly the spermine level. We concluded that iron, but also polyamine depletion, decrease cell growth. However, the drop in cell proliferation obtained with O-trensox was stronger compared to DFMO effect. Altogether, our data provide insights that, in the 3 rat liver cell culture models, the cytostatic effect of the iron chelator O-trensox may be the addition of 2 mechanisms: iron and polyamine depletion.

IT 169209-68-1

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(O-Trensox; modulation of cell proliferation and polyamine metabolism in rat liver cell cultures by iron chelator O-trensox)

RN 169209-68-1 CA

CN 5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

●3 Na

REFERENCE COUNT:

36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 145:413412 CA

TITLE: Development of a fluorescent intercalator displacement

assay (G4-FID) for establishing quadruplex-DNA affinity and selectivity of putative ligands

AUTHOR(S): Monchaud, David; Allain, Clemence; Teulade-Fichou,

Marie-Paule

CORPORATE SOURCE: Laboratoire de Chimie des Interactions Moleculaires,

CNRS UPR285, College de France, Paris, 75005, Fr.

SOURCE: Bioorganic & Medicinal Chemistry Letters (2006),

16(18), 4842-4845

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

AB A fluorescent intercalator displacement assay (G4-FID) has been designed based on the displacement of thiazole orange (TO) positioned onto a quadruplex-forming oligonucleotide by putative ligands. This technique was validated by the use of a set of representative and fully characterized G-quadruplex binders (ranging from pyridodicarboxamide to macrocyclic ligands). To further extend its applicability, a comparative version has been developed which allows a rapid and viable determination of quadruplex- over duplex-selectivity.

IT 794458-56-3

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)

(development of fluorescent intercalator displacement assay for establishing quadruplex-DNA affinity and selectivity of putative ligands)

RN 794458-56-3 CA

CN Quinolinium, 3,3'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 145:262659 CA

TITLE: The new orally active iron chelator ICL670A exhibits a

higher antiproliferative effect in human hepatocyte

cultures than O-trensox

AUTHOR(S): Chantrel-Groussard, Karine; Gaboriau, Francois;

Pasdeloup, Nicole; Havouis, Rene; Nick, Hanspeter; Pierre, Jean-Louis; Brissot, Pierre; Lescoat, Gerard

CORPORATE SOURCE: U522, Inserm, Rennes, F-35000, Fr.

SOURCE: European Journal of Pharmacology (2006), 541(3),

129-137

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

By comparing the antiproliferative effect of the iron chelators ICL670A AB and O-trensox in the human hepatoma cell line HUH7 and human hepatocyte cultures, the authors have shown that ICL670A decreased cell viability, inhibited DNA replication and induced DNA fragmentation more efficiently than O-trensox. O-trensox and ICL670A induced a cell cycle blockade in GO-G1 and S phases resp. In parallel, ICL670A inhibited polyamine biosynthesis by decreasing ornithine decarboxylase and spermidine/spermine N1-acetyltransferase activities. O-trensox increased polyamine biosynthesis and particularly putrescine level by stimulating spermidine-spermine N1-acetyltransferase activity which could activate the polyamine retro-conversion pathway. Moreover, the two chelators exhibit some cytotoxic effect in the two culture models; ICL670A was more cytotoxic than O-trensox and higher concns. of the two chelators were necessary to induce a cytotoxicity in primary cultures vs. hepatoma cells. These results suggested that ICL670A has the most efficient antitumoral effect, blocks cell proliferation by a pathway different of O-trensox and may constitute a potential drug for anticancer

IT 169209-68-1, O-Trensox

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(new orally active iron chelator ICL670A exhibits a higher antiproliferative effect in human hepatocyte cultures than O-trensox) 169209-68-1 CA

CN 5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

RN

●3 Na

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L12 ANSWER 7 OF 15 CA COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         138:131139 CA
                         Cell-cycle drugs for the prevention and treatment of
TITLE:
                         Alzheimer's disease
INVENTOR(S):
                        Nagy, Zsuzsanna
                        Isis Innovation Limited, UK
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 68 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                          APPLICATION NO.
    PATENT NO.
                        KIND
                              DATE
     _____
                        ----
                               -----
                                           -----
   · WO 2003007925
                    A1 20030130 WO 2002-GB3327 20020719
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
                                           US 2002-200023
    US 2003032673
                               20030213
                                                                   20020719
                         A1
                                           AU 2002-319451
    AU 2002319451
                               20030303
                                                                  20020719
                         A1
                               20040421 EP 2002-749036
    EP 1408938
                         A1
                                                                  20020719
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
    EP 1764092
                               20070321
                                           EP 2006-25394
                                                                  20020719
                         Α2
    EP 1764092
                               20070627
                         A3
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
            LI, LU, MC, NL, PT, SE, SK, TR
                                           EP 2006-25393
    EP 1767197
                               20070328
                                                                   20020719
                         A2
                               20070530
    EP 1767197
                         Α3
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
             LI, LU, MC, NL, PT, SE, SK, TR
                                           EP 2006-25392
    EP 1769791
                         A2
                               20070404
                                                                   20020719
    EP 1769791
                         А3
                               20070711
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
             LI, LU, MC, NL, PT, SE, SK, TR
PRIORITY APPLN. INFO.:
                                            GB 2001-17645
                                                               A 20010719
                                            EP 2002-749036
                                                               A3 20020719
                                                             W 20020719
                                            WO 2002-GB3327
    The invention relates to therapeutic agents for use in the prevention or
AB
    use of inhibitors of cell cycle re-entry and progression to the G1/S
    transition point in the prevention or treatment of Alzheimer's disease.
IT
    169209-68-1
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (cell-cycle drugs for prevention and treatment of Alzheimer's disease)
```

treatment of Alzheimer's disease. In particular the invention relates to transition or inhibitors of progression of the cell cycle through the G1/S

RN 169209-68-1 CA

5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-CN ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

OH OH CH2 SO3H

CH2 SO3H

OH OH CH2 SO3H

$$CH_2$$
 OH OH OH CH2 CH2 NH CH2 SO3H

●3 Na

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 137:6086 CA

TITLE: Preparation of substituted carbazolylamides as

neuropeptide Y-5 antagonists

INVENTOR(S): Elliott, Richard L.; Griffith, David A.; Hammond,

Marlys

PATENT ASSIGNEE(S): Pfizer Inc., USA

Ι

SOURCE: U

U.S., 46 pp. CODEN: USXXAM

CODEN: USXX

DOCUMENT TYPE: LANGUAGE:

GI

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6399631	B1	20020604	US 2000-620315	20000721
PRIORITY APPLN. INFO.:			US 1999-145304P P	19990723
OTHER SOURCE(S):	MARPAT	137:6086		

Title compds. I [X, Y, Z = H, halo, OH, NO2, CN, alkyl, alkoxy, amino, alkylamino, etc.; R1 = alkyl, alkylaryl, alkenyl, (cyclo)alkyl, mono/polyfluoroalkyl; A = NR2CO, NR2SO2; R2 = H, alkyl, alkylaryl, alkenyl, etc.] were prepared For instance, 3-amino-9-ethylcarbazole and 4-(dimethylamino)butyric acid were coupled (CH2Cl2, EDC, Et3N, DMAP, 19 h) to give I (X, Y, Z = H; R1 = Et; A = NHCOCH2CH2CH2N(CH3)2; II). II had Ki < 1  $\mu$ M for the neuropeptide Y-5 (NPY-5) receptor. I are useful in treating conditions associated with NPY-5 neurotransmission, e.g., obesity.

IT 432506-48-4P, 9-Ethyl-9H-carbazole-3-carboxylic acid
[2-[N,N-di((quinolin-2-yl)methyl)amino]ethyl]amide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(target drug; preparation of substituted carbazolylamides as neuropeptide Y-5 antagonists)

RN 432506-48-4 CA

CN 9H-Carbazole-3-carboxamide, N-[2-[bis(2-quinolinylmethyl)amino]ethyl]-9ethyl- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

135:242451 CA

TITLE:

Synthesis and nuclease stability of tri-lysyl dendrimer-oligodeoxyribonucleotide hybrids

AUTHOR(S):

Sarracino, D. A.; Richert, C.

CORPORATE SOURCE:

Department of Chemistry, Tufts University, Medford,

MA, 02155, USA -

SOURCE:

Bioorganic & Medicinal Chemistry Letters (2001),

11(13), 1733-1736

CODEN: BMCLE8; ISSN: 0960-894X

Elsevier Science Ltd.

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

Hybrids of oligonucleotides and tri-lysyl-dendrimers with terminal acyl groups were prepared via solid-phase synthesis, including a DNA hexamer bearing an addnl. 3'-appendage. These were shown to be degraded more slowly by nuclease S1 than control strands, particularly at low pH, and, in one case, to form a duplex with a complementary strand whose m.p. at pH 7 was higher than that of the control duplex. A dendrimer-oligonucleotide hybrid with terminal nalidixic acid residues shows increased resistance to endo- and exonucleases, particularly at low pH, as well as enhanced affinity for a target strand.

360577-42-0P IT

> RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(synthesis and nuclease stability of tri-lysyl dendrimer oligodeoxyribonucleotide hybrids)

RN 360577-42-0 CA

Cytidine, 5'-[[N2,N6-bis[N2,N6-bis(3-quinolinylcarbonyl)-L-lysyl]-L-CN lysyl]amino]-5'-deoxythymidylyl-(3'→5')-2'-deoxyadenylyl- $(3'\rightarrow5')-2'-deoxyguanylyl-(3'\rightarrow5')-2'-deoxy-(9CI)$  (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

OR

PAGE 3-B

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 133:99240 CA

TITLE: Antiproliferative and apoptotic effects of O-trensox,

a new synthetic iron chelator, on differentiated human

hepatoma cell lines

AUTHOR(S): Rakba, Nafissa; Loyer, Pascal; Gilot, David; Delcros,

Jean Guy; Glaise, Denise; Baret, Paul; Pierre, Jean

Louis; Brissot, Pierre; Lescoat, Gerard

CORPORATE SOURCE: INSERM U522, Regulations des Equilibres Fonctionnels

du Foie Normal et Pathologique, Hopital Pontchaillou,

Rennes, 35033, Fr.

SOURCE: Carcinogenesis (2000), 21(5), 943-951

CODEN: CRNGDP; ISSN: 0143-3334

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal LANGUAGE: English

We investigated the effects of a new iron chelator, O-Trensox (TRX), AB compared with desferrioxamine (DFO), on proliferation and apoptosis in cultures of the human hepatoblastoma HepG2 and hepatocarcinoma HBG cell lines. Our results show that TRX decreased DNA synthesis in a time- and dose-dependent manner and with a higher efficiency than DFO. Mitotic index was also strongly decreased by TRX and, unexpectedly, DFO inhibited mitotic activity to the same extent as TRX, thus there is a discrepancy between the slight reduction in DNA synthesis and a large decrease in mitotic index after DFO treatment. In addition, we found that TRX induced accumulation of cells in the G1 and G2 phases of the cell cycle whereas DFO arrested cells in G1 and during progression through S phase. These data suggest that the partial inhibition of DNA replication observed after exposure to DFO may be due to a lower efficiency of metal chelation and/or that it does not inhibit the G1/S transition but arrests cells in late S phase. The effects of both TRX and DFO on DNA synthesis and mitotic index were reversible after removing the  $\,$ chelators from the culture medium. An apoptotic effect of TRX was strongly suggested by anal. of DNA content by flow cytometry, nuclear fragmentation and DNA degradation in oligonucleosomes and confirmed by the induction of a high level of caspase 3-like activity. TRX induced apoptosis in a dose- and time-dependent manner in proliferating HepG2 cells. In HBG cells, TRX induced apoptosis in proliferating and confluent cells arrested in the G1 phase of the cell cycle, demonstrating that inhibition of proliferation and induction of apoptosis occurred independently. DFO induced DNA alterations only at concns. > 100  $\mu M$  and without induction of caspase 3-like activity, indicating that DFO is not a strong inducer of apoptosis. Addition of Fe or Zn to the culture medium during TRX treatment led to a complete restoration of proliferation rate and inhibition of apoptosis, demonstrating that Fe/Zn-saturated TRX was not toxic in the absence of metal depletion. These data show that TRX, at concns. of 20-50 µM, strongly inhibits cell proliferation and induces apoptosis in proliferating and non-proliferating HepG2 and HBG cells, resp.

IT 169209-68-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(169209-68-1; mechanism of iron chelator O-trensox

antiproliferative and apoptotic effect on hepatoma and hepatoblastoma) 169209-68-1 CA

RN 169209-68-1 CA CN 5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-

ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

●3 Na

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/773803 L12 ANSWER 11 OF 15 CA COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 132:175808 CA TITLE: Hepatitis C inhibitor peptides INVENTOR(S): Llinas-Brunet, Montse; Bailey, Murray D.; Cameron, Dale; Ghiro, Elise; Goudreau, Nathalie; Poupart, Marc-Andre; Rancourt, Jean; Tsantrizos, Youla S. Boehringer Ingelheim (Canada) Ltd., Can. PATENT ASSIGNEE(S): PCT Int. Appl., 113 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE				APP	LICA			DATE			
WO	2000	0095					2000						19990809				
														CH.		, CU,	
																, IN,	
																, MG,	
																, sL,	
							us,						·	•			•
	RW:		-										BE,	CH,	CY	, DE,	DK,
																, CF,	
							ML,	MR,	NE,	SN	, TD	, TG					
US	6767				В1		2004	0727		TIS	1999	-3686	70			19990	805
CA	2336	597			A1		2000	0224		CA	1999	-2336	5597			19990	809
CA	2336	597			C A B2 A		2006	0214									
AU	9952	732			Α		2000 2003	0306		ΑU	1,999	-5273	32			19990	809
AU	7646	55			B2		2003	0828									
BR	9912	943			A		2001	0508								19990	
	1105	422			A1		2001			EΡ	1999	-9380	85			19990	809
EP	1105				B1		2006										
	R:								GB,	GR	, IT	, LI,	LU,	NL,	SE	, MC,	PT,
				LT,		FI,	RO,										
	2001				T2		2001			TR	2001	-438				19990	
HU	2001	0045	48		A2		2002			HU	2001	-4548	) 04			19990	1809
JP	2002 2001 5103	5225	57		T		2002			O P	2000	-5650	004			19990	1809
EE	2001	0008	U		A		2002						95			エンシン	1609
NZ	5103	95			В		2003									19990	
	5778 3178	95			Œ		2004	031E		TM	1000	-0200	3587			19990	
	2257	066		•	T3	•	2006	0315		EC.	1000	- 2300	10E			19990	
ES NO	2001	000			1.3		2006	0 / 1 0		NO PO	2001	- 3360 - 601	)85 )85			20010	
	2001		72		70.		2002			72	2001	-972				20010	
	2001		122	*	,A ,A		2002			MY	2001	- D	22			20010	
	2001		122 128		.Α.		2005			TN	2001	-MN12	9			20010	
	1052		120		A A		2001			BC.	2001	-1052	122 28 230			20010	
	6495				B1		2006			20	2001	1002	.50			20010	.200
HR	2001	0001	0.1		A1					HR	2001	-101				20010	208
нк	1039	947	·		A1		2005			HK	2002	-1014	72			20010 20020 19980	226
PRIORIT			INFO	. :						US	1998	- 9594	5P		P	19980	810
<del></del> -	<b>-</b>		•							US	1997	-5518	36P		P	19970	
												-1317			B2	19980	810
												-2199			В1	19981	.223
										WO	1999	-CA73	37		W	19990	809

OTHER SOURCE(S):

MARPAT 132:175808

The invention provides peptides I (a, b = 0, 1; Y = H, C1-6 alkyl; B = H, acyl derivative, sulfonyl derivative; W = OH, N-substituted amino), or a pharmaceutically acceptable salt or ester thereof, for use in the treatment of hepatitis C virus infection. Preparation of peptides is included.

IT 259221-55-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (hepatitis C inhibitor peptides and preparation thereof)

RN 259221-55-1 CA

CN Cyclopropanecarboxylic acid, (2S)-2-cyclohexyl-N-(2-quinolinylcarbonyl)glycyl-3-methyl-L-valyl-(4R)-4-[(2-phenyl-4-quinolinyl)oxy]-L-prolyl-1-amino-2-ethenyl-, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

127:274629 CA

TITLE:

DNA-binding studies of XSPTSPSZ, derivatives of the intercalating heptad repeat of RNA

polymerase II

AUTHOR (S):

Harding, Margaret M.; Krippner, Guy Y.; Shelton,

Cathryn J.; Rodger, Alison; Sanders, Karen J.; Mackay,

Joel P.; Prakash, Arungundrum S.

CORPORATE SOURCE:

School of Chemistry, University of Sydney, 2006,

Australia

SOURCE:

Biopolymers (1997), 42(4), 387-398

CODEN: BIPMAA; ISSN: 0006-3525

PUBLISHER:
DOCUMENT TYPE:

Wiley Journal

LANGUAGE:

English

The synthesis, solution conformation, and interaction with DNA of AB three 8-residue peptides structurally related to the heptad repeat unit found at the C-terminus of RNA polymerase II are reported. Peptides QQ, XQ, and PQ are derived from the parent sequence YSPTSPSY (peptide YY), which was reported to bind to DNA by bis-intercalation [M. Suzuki (1990) Nature, Volume 344, pp. 562-565], and contain either a 2-quinolyl (Q), 2-quinoxolyl (X), or 5-phenanthrolyl (P) group in place of the aromatic side chains of the N- and C-terminal tyrosine residues present in the parent sequence. The combined results of linear dichroism and induced CD measurements of peptides QQ, XQ, and PQ with calf thymus DNA are consistent with weak binding of the peptides to DNA in a preferred orientation in which the chromophores are intercalated. Small increases in the melting temps. of poly [d(A-T)2] are also consistent with the peptides interacting with DNA. While enzymic footprinting with DNase I showed no protection from cleavage by the enzyme, chemical footprinting with fotemustine showed that the peptides modify the reactivity of the major groove, presumably via minor groove binding. Peptide QQ inhibited fotemustine alkylation significantly more than either XQ or PQ, and.

IT 196792-88-8

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process) (DNA-binding studies of XSPTSPSZ, derivs. of the intercalating heptad repeat of RNA polymerase II)

RN 196792-88-8 CA

CN L-Alanine, 3-(2-quinolinyl)-L-alanyl-L-seryl-L-prolyl-L-threonyl-L-seryl-L-prolyl-L-seryl-3-(2-quinolinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AUTHOR (S):

L12 ANSWER 13 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 124:85745 CA

TITLE: Metabolization of iron by plant cells using O-Trensox,

a high-affinity abiotic iron-chelating agent. Caris, Catherine; Baret, Paul; Beguin, Claude; Serratrice, Guy; Pierre, Jean-Louis; Laulhere,

Jean-Pierre

CORPORATE SOURCE: Lab. Etudes Dynamiques Structurales Selectivite, Univ.

J. Fourier, Grenoble, 53-38041, Fr.

SOURCE: Biochemical Journal (1995), 312(3), 879-85

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press

DOCUMENT TYPE: Journal LANGUAGE: English

A synthetic siderophore, O-Trensox [tris-N-(2-aminoethyl-[8-AB hydroxyquinoline-5-sulfonato-7-carboxamido])amine], has been designed and synthesized to improve iron nutrition of plants. The affinity for iron of this ligand [pFe(III) = 29.5 and pFe(II) = 17.9] is very high compared with EDTA. In spite of its high and specific affinity for iron, O-Trensox was able to prevent, and to reverse, iron chlorosis in several plant species grown in axenic conditions. It also allows the iron nutrition and growth of Acer pseudoplatanus cell suspensions. The rate of iron metabolization was monitored by 59Fe. Ferritins are shown to be the first iron-labeled proteins during iron metabolization and to be able to further dispatch the metal. Using Fe(III)-Trensox, the rate of iron incorporation into ferritin was higher than when using Fe-EDTA, but slower than with Fe-citrate, the natural iron carrier in xylem. During a plant cell culture, the extracellular concns. of iron complex and free ligand were measured; changes in their relative amts. showed that the iron complex is dissociated extracellularly and that only iron is internalized. suggests a high affinity for iron of a putative carrier on the plasmalemma. In contrast with Fe-citrate and Fe-EDTA complexes, Fe(III)-Trensox is not photoreducible. Its ability to induce radical damage as a Fenton reagent was tested using supercoiled DNA as target mol. Unlike Fe-citrate and Fe-EDTA, Fe(II)-Trensox and Fe(III)-Trensox were harmless even during ascorbate-driven reduction, while Fe-EDTA and Fe-citrate generate heavy damage to DNA.

IT 169209-68-1, O-Trensox

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (siderophore for metabolization of iron by plant cells)

RN 169209-68-1 CA

CN 5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

$$\begin{array}{c} \text{OH} \\ \text{CH}_2 \\ \text{SO}_3\text{H} \\ \text{C} \\ \text{NH} \\ \text{CH}_2 \\ \text{SO}_3\text{H} \\ \text{SO}_3\text{H} \\ \end{array}$$

●3 Na

L12 ANSWER 14 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

113:52145 CA

TITLE:

The interaction of substituted and rigidly linked

diquinolines with DNA

AUTHOR(S):

McFadyen, W. David; Sotirellis, N.; Denny, William A.;

Wakelin, Laurence P. G.

CORPORATE SOURCE:

Sch. Sci. Math. Educ., Univ. Melbourne, Parkville,

3052, Australia

SOURCE:

Biochimica et Biophysica Acta, Gene Structure and

Expression (1990), 1048(1), 50-8 CODEN: BBGSD5; ISSN: 0167-4781

DOCUMENT TYPE:

LANGUAGE:

Journal English

Ι

GI

Viscometric measurements with circular and sonicated rodlike DNA AB fragments were used to explore whether ring substituents or conformationally restricted linkers promote bifunctional intercalation among a series of binuclear 4-aminoquinolines (I, R = H or Me, Rl = H or NH2) bridged via their 4-amino group. Ligands comprising unsubstituted quinolines and piperazine or pyrazole linkages bisintercalate. Quinoline-substituted alkyl-linked dimers intercalate in either a mixed monofunctional-bifunctional mode or bind with only one of their chromophores intercalated depending on the nature of the substituents. Equilibrium dialysis measurements show that the binding affinity for calf thymus DNA of the compds. studied ranges from (1.2-12).104M-1 in buffer of ionic strength 0.1. Both cooperative and anticooperative binding isotherms were obtained and there is evidence for a second binding mode for the piperazine-linked diquinoline at saturating binding levels. For this compound the high-affinity association constant decreases with increasing ionic strength, 3.4 cations being released per bound ligand mol. Partition dialysis measurements with DNAs of differing base composition indicate that the compds. studied are either AT selective or sequence neutral depending on ligand structure. For example, the pyrazole linker imparts a marked specificity for binding to AT-rich DNA, whereas the piperazine linker does not. Kinetic measurements using the surfactant-sequestration method reveal that DNA-diquinoline complexes dissociate very rapidly by complex mechanisms with rate consts. > 100 s-1 in buffer of ionic strength 0.1.

IT 128341-28-6

RL: PRP (Properties)

(interaction of, with DNA, neoplasm inhibition in relation to)

RN 128341-28-6 CA

CN 1H-Pyrazole-3,5-dicarboxamide, 1-methyl-N,N'-bis[2-(4-quinolinylamino)ethyl]- (9CI) (CA INDEX NAME)

CH<sub>2</sub>

NH

PAGE 2-A

L12 ANSWER 15 OF 15 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

90:66509 CA

TITLE:

Potential antitumor agents. 29. Quantitative

structure-activity relationships for the antileukemic

bisquaternary ammonium heterocycles

AUTHOR (S):

Denny, William A.; Atwell, Graham J.; Baguley, Bruce

C.; Cain, Bruce F.

CORPORATE SOURCE:

Exp. Chemother. Res. Lab., Pew Zealand Cancer Soc.,

Auckland, N. Z.

SOURCE:

Journal of Medicinal Chemistry (1979), 22(2), 134-50

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Quant. relations between physicochem. drug properties and antileukemic AB (L1210) efficacy were examined for a series of bisquaternary ammonium heterocycles employing multiple variable regression anal. The synthesis of these compds. is described. The drug dose necessary to provide a 40% increase in life span and the chemotherapeutic index were independent of toxicity. There was a parabolic relation between agent lipophilic-hydrophilic balance and the percentage increase in mean life span of leukemic animals at the LD10 dose. Relative levels of drug-DNA interaction were obtained by spectrofluorimetric quantitation of drug displacement of DNA-bound ethidium. Extensive quant. structure-activity relations are discussed.

IT 14120-94-6

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(antileukemic activity of)

14120-94-6 CA RN

Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-butyl-, salt CNwith 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

CM

CRN 16722-51-3 CMF C7 H7 O3 S

CM

CRN 14106-83-3 C33 H35 N5 O2 CMF

=> d ibib abs fhitstr 1-2

SOURCE:

PUBLISHER:

L14 ANSWER 1 OF 2 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 145:159240 CA

TITLE: Synthesis and biological evaluation of

heteroaryldiamides and heteroaryldiamines as cytotoxic agents, apoptosis inducers and caspase-3 activators Echeverria, Mikel; Mendivil, Beatriz; Cordeu, Lucia;

AUTHOR(S): Echeverria, Mikel; Mendivil, Beatriz; Cordeu, Lucia; Cubedo, Elena; Garcia-Foncillas, Jesus; Font, Maria;

Sanmartin, Carmen; Palop, Juan Antonio

CORPORATE SOURCE: Seccion de Sintesis, Departamento de Quimica Organica

y Farmaceutica, University of Navarra, Pamplona, Spain

Archiv der Pharmazie (Weinheim, Germany) (2006),

339(4), 182-192

CODEN: ARPMAS; ISSN: 0365-6233 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:159240

The work described here involved the synthesis and biol. evaluation of new AB heteroaryldiamides and heteroaryldiamines. A new general model in which the structures can be adjusted has been applied in this study. Three different structural units can be distinguished: a central nucleus and 2 sym. terminal units. The central element is either an aliphatic chain of varying length and flexibility, piperazine, or a polyamine nucleus. However, the terminal units are pyridine, quinoline, indole, benzene or pyrido[2,3-d]pyrimidine with different substituents. The antitumoral activities of the compds. were evaluated in vitro by examining their cytotoxic effects against human breast, colon, and bladder cancer cell lines. Compds. that showed cytotoxic activity were subjected to both apoptosis and caspase-3 assays. With regard to selectivity, the cytotoxicity was also determined in cell cultures of two non-tumoral lines. The most promising compds. containing amino-pyridinium, quinolyl-N-oxide, and pyridyl derivs., resp., and these reveal a significant in vitro cytotoxicity in at least 2 of 3 cell lines tested. These compds. induced apoptosis and also produced a rapid dose-dependent increase in the caspase-3 level in HT-29 cells. Other encouraging profiles were found, such as those presented by 1k and 8d, which are cytotoxic and apoptotic but do not provoke an increase in the level of caspase-3, or those presented by 2f, 3c and 4a, which are slightly cytotoxic but do not show any other significant activity. The different types of behavior of each compound are not necessarily parallel in the 3 cell lines tested.

IT 875229-02-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis and biol. evaluation of heteroaryldiamides and heteroaryldiamines as cytotoxic agents, apoptosis inducers and caspase-3 activators)

RN 875229-02-0 CA

CN Piperazine, 1,4-bis(3-quinolinylcarbonyl) - (9CI) (CA INDEX NAME)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS

L14 ANSWER 2 OF 2 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

138:187773 CA

TITLE: Preparation of aminoisoxazoles as protein kinase

inhibitors for treatment of cancer and other

proliferative diseases

INVENTOR(S): Cavicchioli, Marcello; Pevarello, Paolo; Salom,

Barbara; Vulpetti, Anna

PATENT ASSIGNEE(S):

Pharmacia Italia S.p.A., Italy

SOURCE: PCT Int. Appl., 253 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.									APPLICATION NO.									
WO.	2002	0125	17		777				WO 2002-EP8634								20020	729	
WO																	, CH,		
	VV :																, CH, , GE,		
				•	•	•	•	•	•		•			•			, UK,		
						•			•		•	•					, OM,	-	
																	, TT,		
							YU,					J_,	-0,	,	,		,,	,	
	RW:			•	•							TZ.	UG.	ZM.	ZW.	AT	, BE,	BG,	
																	, MC,		
		PT,	SE,	SK,	TR,	BF,	вJ,	CF,	CG,	C	Ι,	CM,	GA,	GN,	GQ,	GW	, ML,	MR,	
			SN,																
CA	2455	631			A1		2003	0220		CA	20	02-	2455	631			20020	729	
ŪΑ	2002	3426																	
EP	1435	948			A1		2004	0714		EΡ	20	02-	7792	57			20020	729	
	R:																, MC,	PT,	
		ΙE,	SI,	LT,	LV,		RO,												
	2002																20020		
CN	1549 2005	714			Α		2004										20020		
		5010	73		Т												20020		
	5307				A		2005										20020		
	2004						2005										20040		
	2004						2004			MX	20	04-	PA92 511	O			20040		
	2004				A		2004										20040		
	2004						2005										20040 20041		
	2005				ΑI		2005	U31/											
PRIORIT	1 APP	ти	TMLO	. :									EP86				20010 20020		
OTHER S	OURCE	(S):			MAR	PAT	138:	1877	73	WO	20	02-	BF00	J **		**	20020	123	

II

GI

Title compds. I [wherein R = (un) substituted heteroaryl group optionally ABcondensed with a carbocycle or heterocycle; X = N(R3); or O; Y = CH(R3), CO, CONH, or SO2; or Y may be a single bond when R2 = H or cycloalkyl; R1 = H or (un)substituted (cyclo)alkyl, aryl(alkyl), or heterocyclyl(alkyl) optionally condensed with a carbocycle or heterocycle; R2 and R3 = independently as defined for R1 or (un) substituted alkenyl or alkynyl; or pharmaceutically acceptable salts thereof] together with pharmaceutical compns. comprising them, as well as methods for their preparation, are disclosed. An addnl. aspect of the present invention relates to the solid phase synthesis of combinatorial libraries of the isoxazolamines. For example, 4-(4-formyl-3-methoxyphenoxy) butyryl AM resin was swollen in CH2Cl2 and treated with aniline, AcOH, and NaBH(OAc)3 to give the 4-[3-methoxy-4-(phenylaminomethyl)phenoxy]butyryl AM resin (no data), which was amidated with cyanoacetic acid. Treatment with (2-pyridyl) hydroxyaminomethyl chloride and LiHMDS in THF to give the isoxazole, followed by removal of the amide from the resin using a solution of THF 20% in anhydrous CH2Cl2 afforded II. I or compns. containing them are useful in the treatment of diseases caused by and/or associated with an altered protein kinase activity such as cancer, cell proliferative disorders, Alzheimer's disease, viral infections, auto-immune diseases, and neurodegenerative disorders (no data). IT 498018-16-9P, 5-Amino-N-(quinolin-8-yl)-3-(quinolin-2-yl)isoxazole-4-carboxamide RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses) (kinase inhibitor; solid phase preparation of aminoisoxazole protein kinase inhibitors from cyanoacetic acids or amides and hydroxylamines as anticancer and antiproliferative agents) RN 498018-16-9 CA 4-Isoxazolecarboxamide, 5-amino-3-(2-quinolinyl)-N-8-quinolinyl- (CA

INDEX NAME)

CN

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT => d l16 ibib abs fhitstr 1-22

L16 ANSWER 1 OF 22 CA

COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

146:229195 CA

TITLE:

Preparation of quinoline derivatives as antibacterial

agents

INVENTOR(S):

Guillemont, Jerome Emile Georges; Lancois, David Francis Alain; Pasquier, Elisabeth Therese Jeanne; Andries, Koenraad Jozef Lodewijk Marcel; Koul, Anil

Janssen Pharmaceutica N.V., Belg.

PATENT ASSIGNEE(S):

PCT Int. Appl., 109pp.

SOURCE:

GΙ

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE						
WO 2007014885	A1 20070208	WO 2006-EP64656	20060726						
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,						
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,						
GE, GH, GM,	HN, HR, HU, ID,	IL, IN, IS, JP, KE,	KG, KM, KN, KP,						
KR, KŽ, LA,	LC, LK, LR, LS,	LT, LU, LV, LY, MA,	MD, MG, MK, MN,						
MW, MX, MZ,	NA, NG, NI, NO,	NZ, OM, PG, PH, PL,	PT, RO, RS, RU,						
SC, SD, SE,	SG, SK, SL, SM,	SY, TJ, TM, TN, TR,	TT, TZ, UA, UG,						
US, UZ, VC,	VN, ZA, ZM, ZW								
RW: AT, BE, BG,	CH, CY, CZ, DE,	DK, EE, ES, FI, FR,	GB, GR, HU, IE,						
IS, IT, LT,	LU, LV, MC, NL,	PL, PT, RO, SE, SI,	SK, TR, BF, BJ,						
CF, CG, CI,	CM, GA, GN, GQ,	GW, ML, MR, NE, SN,	TD, TG, BW, GH,						
GM, KE, LS,	MW, MZ, NA, SD,	SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,						
KG, KZ, MD,	RU, TJ, TM								
PRIORITY APPLN. INFO.:		EP 2005-106962	A 20050728						
OTHER SOURCE(S):	MARPAT 146:2291	MARPAT 146:229195							

$$R^{7}$$
 $R^{6}$ 
 $R^{1}$ 
 $R^{7}$ 
 $R^{6}$ 
 $R^{1}$ 
 $R^{7}$ 
 $R^{6}$ 
 $R^{7}$ 
 $R^{6}$ 
 $R^{7}$ 
 $R^{7$ 

Use of a compound for the manufacture of a medicament for the treatment of a bacterial infection provided that the bacterial infection is other than a Mycobacterial infection, said compound being a compound of formula I & II (Z = -X-NR4R5 or -CO2R8; R1 = cyano, halo(alkyl), hydroxy, etc.; R2 = H, aryl, mercapto, etc.; R3 = alkyl, aryl(alkyl), mono- or di-alkylaminoalkyl or heterocyclyl(alkyl); R4, R5 = independently H, (alkoxy)alkyl, aryl, etc.,

RN

or R4R5N = heterocyclyl; R6 = (un)substituted aryl or heterocyclyl; R7 = H, halo, alkyl, aryl or heterocyclyl; R8 = saturated hydrocarbon radical; m = 0-4; n = 1-3), a pharmaceutically acceptable acid or base addition salt, a quaternary amine, a stereochem. isomeric form, a tautomeric form or a N-oxide form thereof. For example, III was provided in a multi-step synthesis starting from the reaction of 5-bromo-1H-indole-2,3-dione with 1,3-diphenyl-1-propanone. I showed antibacterial activity in Microtitre plate assay.

IT 924632-44-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinoline derivs. for treatment of bacterial infection) 924632-44-0 CA

CN Ethanone, 2-[[(6-bromo-2-methoxy-3-quinolinyl)phenylmethyl](2-quinolinylmethyl)amino]-1-(4-thiomorpholinyl)- (CA INDEX NAME)

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 145:455035 CA

TITLE: Preparation of pyrrolobenzodiazepine derivatives for

treatment of proliferative diseases

INVENTOR(S): Gregson, Stephen John; Howard, Philip Wilson; Chen,

Zhizhi

PATENT ASSIGNEE(S): Spirogen Limited, UK

SOURCE: PCT Int. Appl., 77pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	KINI	D	DATE			APPL	ICAT:	ION I		DATE					
				-								-			
WO 200	6111759	)	A1		2006	1026	1	WO 2	006-0	GB14		2	00604	421	
₩:	AE, A	G, AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN, C	CO, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE, G	SH, GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
	KZ, L	C, LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
	MZ, N	IA, NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
	SG, S	K, SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
	VN, Y	U, ZA,	ZM,	zw											
· RW	: AT, B	BE, BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	ĠB,	GR,	HU,	ΙE,
	IS, I	T, LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
	CF, C	G, CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
	GM, K	Œ, LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
•	KG, K	ZZ, MD,	RU,	TJ,	TM										
PRIORITY AP	PLN. IN	IFO.:					(	GB 2	005-	8084		7	A 20	00504	421
					.(	GB 2	005-	22746 A 20051107							
OTHER SOURC	E(S):		MARI	PAT	145:	4550	35								

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- AB The title compds. with general formula I [wherein: R2 = (un) substituted aryl; R6 and R9 = independently H, R, OH, OR, SH, SR, NH2, NHR, NRR', nitro, Me3Sn, or halo, where R and R' = independently (un) substituted alkyl, heterocyclyl, or aryl; R7 = H, R, OH, OR, SH, SR, NH2, NHR, NHRR', nitro, Me3Sn, or halo; Z = alkylene; X = O, S, or NH; n = 2 or 3] or pharmaceutically acceptable salts or solvates thereof are prepared for the treatment of proliferative diseases. For example, compound II•2Na was prepared in a multi-step synthesis. II•2Na showed IC50 of 1.5 nM in the In Vitro cytotoxicity test with K562 human chronic myeloid leukemia cells.
- IT 913262-23-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyrrolobenzodiazepine derivs. for treatment of proliferative diseases)

RN 913262-23-4 CA

CN 1H-Pyrrolo[2,1-c][1,4]benzodiazepine-10(5H)-carboxylic acid, 8,8'-[1,3-propanediylbis(oxy)]bis[11-[[(1,1-dimethylethyl)dimethylsilyl]ox y]-11,1la-dihydro-7-methoxy-5-oxo-2-(7-quinolinyl)-, bis(2,2,2-trichloroethyl) ester, (11S,11'S,11aS,11'aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CORPORATE SOURCE:

L16 ANSWER 3 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 145:305637 CA

TITLE: Similar Structure-Activity Relationships of Quinoline

Derivatives for Antiprion and Antimalarial Effects Klingenstein, Ralf; Melnyk, Patricia; Leliveld, S.

AUTHOR(S): Klingenstein, Ralf; Melnyk, Patricia; Leli Rutger; Ryckebusch, Adina; Korth, Carsten

Institute for Neuropathology, Heinrich Heine

University Duesseldorf, Duesseldorf, 40225, Germany

SOURCE: Journal of Medicinal Chemistry (2006), 49(17),

5300-5308

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:305637

AB Prion diseases are invariably fatal neurodegenerative diseases, in which the infectious agent consists of PrPSc, a pathogenic misfolded isoform of the normal cellular prion protein (PrPC). Until now, no pharmacol . options exist for these novel pathogens. Here we describe the screening of a series of polyquinolines and quinolines linked to a large variety of terminal groups for their ability to cure a persistently prion infected cell line (ScN2a). Several compds. showed antiprion activity in the nanomolar range. The most active mol., named 42, had a half-effective concentration (EC50) for antiprion activity of 50 nM. In a library of quinoline

derivs. we were able to identify several structure-activity relationships (SAR). Remarkably, antiprion SAR in ScN2a cells were similar to antimalarial SAR in a cell model of malaria, particularly for the sulfonamide quinoline derivs., suggesting that some mol. targets of antiprion and antimalarial substances overlap.

IT 347895-75-4

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(similar structure-activity relationships of quinoline derivs. for antiprion and antimalarial effects)

RN 347895-75-4 CA

CN 1H-1,4,7-Triazonine-1-pentanamide, 4,7-bis(7-chloro-4-quinolinyl)-N,Nbis[2-[(7-chloro-4-quinolinyl)amino]ethyl]octahydro-δ-oxo- (CA
INDEX NAME)

PAGE 1-A

PAGE 2-A

 $R2-CH_2-R$ 

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

INVENTOR(S):

L16 ANSWER 4 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 144:51568 CA

Preparation of substituted 2-quinolyl-oxazoles and TITLE:

their heterocyclic analogs useful as pde4 inhibitors Kuang, Rongze; Blythin, David; Shih, Neng-Yang; Shue, Ho-Jane; Chen, Xiao; Cao, Jianhua; Gu, Danlin; Huang,

Ying; Schwerdt, John H.; Ting, Pauline C.; Wong,

Shing-Chun; Xiao, Li

Schering Corporation, USA PCT Int. Appl., 233 pp. PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE				APP	LICAT	ION :		DATE				
						-	2005	1000	,		2005		 124	<b>-</b>	-	0050	 -1 <i>-</i>	
WO											2005-							
	W:										, BG,							
											, EC,			-				
											, JP,							
											, MG,							
											, RO,							
		SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ	, UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	
			ZM,															
	RW:										, SL,							
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AΤ	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS	, IT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG	, CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	TG												
AU	2005	2479	06		A1		2005	1208		AU	2005-	2479	06		2	0050	516	
CA	2565	599			A1		2005	1208		CA	2005-	2565	599		2	0050	516	
US	2006	1060	62		A1		2006	0518		US	2005-	1303	59		2	0050	516	
EP	1758	883			A1		2007	0307		ΕP	2005-	7500	76		2	0050	516	
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT	, RO,	SE,	SI,	SK,	TR,	AL,	BA,	
•				MK,		·	·											
CN	1984	901	•	-	Α		2007	0620		CN	2005-	8002	3666		2	0050	516	
MX	2006	PA13	414		Α		2007	0123		MX	2006-	PA13	414		2	0061	117	
	2007									KR	2006-	7241	86		2	0061	117	
	2006									IN	2006-	CN42	54		2	0061	117	
	2006									NO	2006-	5830			2	0061	215	
PRIORIT											2004-					0040	518	
	- ··- ·			•							2005-					0050		
OTHER S	OURCE	(S):			MAR	PAT	144:	5156		-					_	•	. — -	

GI

$$R^{1}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 

AB Title compds. I [R1 = H, alkyl, cycloalkyl; R2, R3 and R5 independently = H or halo; R4 = H, halo, alkyl, etc.; A = substituted oxazolyl, imidazole, thiazole or pyrrole], and their pharmaceutically acceptable salts, are prepared and disclosed as pde4 inhibitors. Thus, e.g., II was prepared in a multistep synthesis from 2-trifluoromethyl-8-methoxyquinolin-5-yl carboxylic acid. In PDE4 assays, selected compds. possessed IC50 values ranging from 0.01-1.8 nM. Also claimed are pharmaceutical compns., the use of the compds. as PDE4 inhibitors, and combinations with other actives.

IT 871000-17-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted quinolyloxazoles and their heterocyclic analogs useful as PDE4 inhibitors)

RN 871000-17-8 CA

CN 4-Oxazolecarboxamide, 5-(aminomethyl)-2-[8-methoxy-2-(trifluoromethyl)-5-quinolinyl]-N-(5-quinolinylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} F_3C & & CH_2 \\ N & & NH \\ N & & C \\ \hline \\ CH_2-NH_2 \\ \end{array}$$

6

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 141:410965 CA

TITLE: Preparation of 1-(piperazinylalkyl)-3-quinolinylurea

derivatives as urotensin II antagonists

INVENTOR(S): Aissaoui, Hamed; Binkert, Christoph; Clozel, Martine;

Mathys, Boris; Mueller, Claus; Nayler, Oliver; Scherz,

Michael; Velker, Jorg; Weller, Thomas

PATENT ASSIGNEE(S): Actelion Pharmaceuticals Ltd, Switz.

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2004099179	A1 20041118	WO 2004-EP4716	20040504			
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,			
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,			
GE, GH, GM,	'HR, HU, ID, IL,	IN, IS, JP, KE, KG,	KP, KR, KZ, LC,			
LK, LR, LS,	LT, LU, LV, MA,	MD, MG, MK, MN, MW,	MX, MZ, NA, NI,			
NO, NZ, OM,	PG, PH, PL, PT,	RO, RU, SC, SD, SE,	SG, SK, SL, SY,			
TJ, TM, TN,	TR, TT, TZ, UA,	UG, US, UZ, VC, VN,	YU, ZA, ZM, ZW			
RW: BW, GH, GM,	KE, LS, MW, MZ,	NA, SD, SL, SZ, TZ,	UG, ZM, ZW, AM,			
AZ, BY, KG,	KZ, MD, RU, TJ,	TM, AT, BE, BG, CH,	CY, CZ, DE, DK,			
		IE, IT, LU, MC, NL,				
SI, SK, TR,	BF, BJ, CF, CG,	CI, CM, GA, GN, GQ,	GW, ML, MR, NE,			
SN, TD, TG		, , , ,	, , , , , , ,			
CA 2523566	A1 20041118	CA 2004-2523566	20040504			
EP 1631565	A1 20060308	EP 2004-730996	20040504			
R: AT. BE. CH.	DE. DK. ES. FR.	GB, GR, IT, LI, LU,	NL, SE, MC, PT,			
		CZ, EE, HU, PL, SK				
		CN 2004-80012307	20040504			
		JP 2006-505365				
		US 2005-555429				
PRIORITY APPLIN. INFO.:		WO 2003-EP4774				
		WO 2003-EP304774				
		WO 2004-EP4716				
OTHER SOURCE(S):	MARPAT 141:4109					

GI

Title compds. I [wherein Py = (un) substituted pyridinyl, quinolinyl; X = AΒ (un) substituted aryl(alkyl), alkylsulfonyl, aryl(alkyl) sulfonyl, (aryl)alkanoyl, aroyl, substituted carbamoyl; Y = CR4R5CH2, CH2CR4R5; R1 = H, Me; R4 = H, (aryl)alkyl, aryl; R5 = H, Me; or CR4R5 = carbocyclic ring; and enantiomers, diastereomers, racemates, pharmaceutically acceptable salts, solvate complexes, and morphol. forms thereof] were prepared as neurohormonal antagonists. For example, II was synthesized in four steps starting from 4-amino-2-methylquinoline, 2-chloroethyl isocyanate, piperazine-1-carboxylic acid tert-Bu ester, and benzenesulfonyl chloride (no data for intermediates). In binding assays of human [1251] -urotensin II to human-derived TE-671 rhabdomyosarcoma cells, compds. of the invention showed activity with IC50 values ranging from 10 nM to 1000 nM. Thus, I and their pharmaceutical compns., optionally comprising other pharmacol. active compds., are useful for treating a variety of disorders associated with dysregulation of urotensin II, such as heart disease, hypertension, kidney disease, diabetes, asthma, and pulmonary disease (no data). 791816-24-5P, 1-(2-Methylquinolin-4-yl)-3-[2-[4-[(quinolin-6yl)carbonyl]piperazin-1-yl]ethyl]urea RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (urotensin II antagonist; preparation of (piperazinylalkyl)(quinolinyl)urea derivs. as urotensin II antagonists for treatment of heart disease, hypertension, kidney disease, diabetes, asthma, pulmonary disease, and other disorders) 791816-24-5 CA RN 1-Piperazineethanamine, N-[[(2-methyl-4-quinolinyl)amino]carbonyl]-4-(6-CN

quinolinylcarbonyl) - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
& & & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& & & \\
& &$$

5

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 6 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 141:225539 CA

TITLE: Preparation of piperazine-2-carboxamides as

antagonists of prostaglandin receptors, particularly

of the prostaglandin  $F2\alpha$  receptors

INVENTOR(S): Page, Patrick; Jorand-lebrun, Catherine; Thomas,

Russel J.; Schwarz, Matthias

PATENT ASSIGNEE(S): Applied Research Systems Ars Holding N.V., Neth.

Antilles

SOURCE: PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.									APPL	ICAT	ION I		DATE					
_	2004		90		A2		2004		WO 2004-EP50093						2	20040206			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ	DE,	DK,	DM,	DΖ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΑ,	NI		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ΰĠ,	ZM,	ZW,	ΑT,	BE,		
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙĒ,	IT,	LU,		
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,		
AU	2004	2123	35		A1		2004	0826		AU 2	004-	2123	35		2	0040	206		
CA	2513	716			A1		2004	0826		CA 2	004-	2513	716		2	0040	206		
EP	1592	389			A2		2005	1109		EP 2	004-	7087	76		2	0040	206		
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK			
JP	2006	5175	66		$\mathbf{T}$		2006	0727		JP 2	006-	5020	09		2	0040	206		
	2005															0050	826		
US	2007	1423	91		A1		2007	0621		US 2	007-	5452	96		2	0070	117		
PRIORIT	Y APP	LN.	INFO	. :						EP 2	003-	3422		7	A 2	0030	214		
•										WO 2	004-1	EP50	093	7	<b>V</b> 2	0040	206		
OTHER SO	OURCE	(S):			MAR	PAT	141:	2255	39							•			

Title compds. I [wherein A, B = independently heterocyclo/alkylheterocyclo/cyclo/alkyl, alkyl/alkenyl/alkynyl/hetero/alk ylhetero/alkenylhetero/alkynylhetero/aryl, etc.; X = CO, SO2; Y = SO2, CO, CONH and derivs.; R1, R2 = independently H, OH, sulfonyl, NH2, alk(en/yn)yl, hetero/aryl fused with cycloalkyl, cycloalkyl fused with hetero/aryl, etc.; or R1NR2 = heterocyclyl containing an O, N, or S; their geometrical isomers, racemates, enantiomers, diastereomers, and their pharmaceutically acceptable salts and pharmaceutically acceptable active derivs.] were prepared as antagonists of prostaglandin receptors, particularly of the prostaglandin  $F2\alpha$  receptors. For example, II was prepared, in 98.5% purity, by a solid phase synthesis from acid III, 3,4-dichlorophenyl isocyanate, and (S)-1-aminoindane. II displayed binding affinity for human prostaglandin  $F2\alpha$  receptors (Ki =  $0.816 \mu M$ ) in an in vitro competition binding assay. II inhibited

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

CN

human prostaglandin F2 $\alpha$ -induced Ca2+-mobilization in HEB EBNA cells with an IC50 = 0.495  $\mu$ M, demonstrating its antagonist activity. Thus, I are useful for the treatment and/or prophylaxis of preterm labor, premature birth, dysmenorrhea and for stopping labor prior to cesarean delivery.

TT 745800-80-0P, N-(2-Phenylpropyl)-1,4-bis[(quinolin-8yl)sulfonyl]piperazine-2-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(prostaglandin F2 $\alpha$  receptor antagonist; preparation of piperazine-2-carboxamides as antagonists of prostaglandin receptors, particularly of the prostaglandin F2 $\alpha$  receptors)

RN 745800-80-0 CA

2-Piperazinecarboxamide, N-(2-phenylpropyl)-1,4-bis(8-quinolinylsulfonyl)-(CA INDEX NAME)

L16 ANSWER 7 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 140:217519 CA

TITLE: Preparation of quinoline derivatives as  $TGF\beta$ 

inhibitors

INVENTOR(S): Shimizu, Kiyoshi; Shimizu, Toshiyuki; Kimura, Kaname;

Kawakami, Kazuki; Nakoji, Masayoshi

PATENT ASSIGNEE(S): Kirin Beer Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 628 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.						KIND DATE				APPLICATION NO.							DATE		
	WO	2004	 0184:	30		A1	-	2004	0304	,	WO 2	003-	JP10	547		2	0030	822		
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
		•	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,		
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,		
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,		
			TR,	TT,	TZ,	UA,	UG,	US,	ÜΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,		
			KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,		
			FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,		
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
	ΑU	2003	2576	66		A1		2004	0311		AU 2	003-	2576	66		2	0030	822		
	ΕP	1548	800			A1		2005	0629		EP 2	003-	7928	05		2	0030	822		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,		
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK			
	CN	1688	549			Α		2005	1026		CN 2	003-	8243	97		2	0030	822		
	US	2006	1113	75						1	US 2	005-	5250	87		2	0050	223		
PRIO	RITY	APP	LN.	INFO	. :						JP 2	002-	2440	28		A 2	0020	823		
										1	WO 2	003-	JP10	647	1	W 2	0030	822		

OTHER SOURCE(S): MARPAT 140:217519

AB The title compds. I [wherein X = CH or N; Z = O, NH, S, or CO; R and R' = independently H, halo, (un)substituted alkyl, alkenyl, NH2, CONH2, OH, or heterocyclyl; A = (un)substituted Ph or (hetero)cyclyl] or pharmaceutically acceptable salts, or solvates thereof are prepared as transforming growth factor (TGF)  $\beta$  inhibitors. For example, 4-chloro-6,7-dimethoxyquinoline was reacted with 2-benzylphenol in 1,2-dichlorobenzene to give 4-(2-benzylphenoxy)-6,7-dimethoxyquinoline (10%). Some of compds. I inhibited 100% of human TGF $\beta$  at 10  $\mu M$ .

IT 666733-25-1P

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of quinoline derivs. as TGF $\beta$  inhibitors) RN 666733-25-1 CA

3-Piperidinecarboxamide, 1-[2-[[6-methoxy-4-[(2-methyl-3-quinolinyl)oxy]-7-quinolinyl]oxy]ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{N} \\ \hline \\ \text{O} & \text{OMe} \\ \hline \\ \text{O} & \text{CH}_2 - \text{CH}_2 - \text{N} \\ \hline \\ \text{O} & \\ \end{array}$$

REFERENCE COUNT:

50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 8 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 140:181315 CA

TITLE: Preparation of furanones as cytoprotectants for

dermatologic conditions

INVENTOR(S): Boddupalli, Sekhar; Walkinshaw, Gail; Wang, Bing

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 66 pp., Cont.-in-part of U.S.

Ser. No. 354,474.

CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.					D	DATE			APPLICATION NO.					DATE			
	US 2004	0298	12		Al	-	2004	0212							2	0030	730	
	US 2003	1763	61		A1		2003	0918		US 2	003-	3544	74		2	0030	128	
	US 6667	330			B2		2003	1223										
	WO 2005	0163	40		A1		2005	0224	,	WO 2	004-1	JS24	491		2	0040	728	
	₩:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	ВW,	BY,	BZ,	CA,	CH,	
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
							TZ,											
	RW:	BW,																
		AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
							CF,											
		SN,	TD,	TG														
	EP 1660	080			A1		2006	0531		EP 2	004-	7861	36		2	0040	728	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK					
PRIOR	ITY API	LN.	INFO	. :						US 2	002-	3539	39P		P 2	0020	131	
									,	US 2	003-	3544	74		A2 2	0030	128	
										US 2	003-	6301	70		A 2	0030	730	
										WO 2	004-1	JS24	491	1	₩ 2	0040	728	
$\bigcirc$ THED	OTHER SOURCE(S).				MARRAT 140.181315													

OTHER SOURCE(S):

MARPAT 140:181315

GI

$$\begin{array}{c}
0 \\
R^{1} \\
R^{2} - X
\end{array}$$

Title compds. I [R1 = CO2R', CONR'R'', CH2OR''', CN, (un) substituted AB heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl; R2, R3 = independently (un) substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, nucleoside, amino acid, di-, trior tetra-peptide; R4 = H, alkyl, alkylcarbonyl, (poly)alkoxyalkylene, dialkoxyphosphoryloxy; X = alkylene, NR', S, SO, SO2; or XR2 = PO(OR')2; Y = NR', S, SO, SO2; or YR3 = PO(OR')2; or XR2YR3 = (un)substituted aliphatic or aromatic ring; R' = H, alkenyl, (un) substituted alkyl, cycloalkyl, phosphoryl, aryl; R'' = H, alkenyl, (un) substituted alkyl, aryl; or R'R'' = atoms that form (un) substituted 5-7 membered aryl, heteroaryl ring; R''' = H, alkenyl, (un) substituted alkyl, acyl, cycloalkyl, phosphoryl, aryl; and their single tautomers, single stereoisomers, mixts. of tautomers and/or stereoisomers, and pharmaceutically acceptable salts] were prepared as cytoprotectants for treating dermatol. conditions. example, II was prepared by reaction of 2-mercaptobenzimidazole with Et bromopyruvate in ethanol/acetone and aldol condensation of the two tautomeric forms of the pyruvate intermediate. Selected invention compds. showed significant reduction in edema in assays assessing mouse ear inflammatory response to topical arachidonic acid (10% to 70%, p < 0.05). Results from various assays were disclosed for selected invention compds. Thus, I and their pharmaceutical formulations are useful for regulating skin condition, regulating the signs of skin aging or for treating contact dermatitis, skin irritation, acne, rosacea, psoriasis, age-related damage or damage resulting from harmful (UV) radiation or environmental pollution, stress or fatigue. ΙT

II

FIVE TORNING TO THE POSITION OF THE PROPERTY O

(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of dermatol. conditions)

RN 577953-28-7 CA

N 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[[7-(trifluoromethyl)-4-quinolinyl]thio]-2-[[[7-(trifluoromethyl)-4quinolinyl]thio]methyl]-, ethyl ester (CA INDEX NAME)

L16 ANSWER 9 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 139:179965 CA

TITLE: Preparation of furanones as cytoprotectants for

neuroinflammation and neurodegenerative disorders Wang, Bing; Zhang, Wei; Song, Jiangao; Del Balzo,

INVENTOR(S): Wang, Bing; Zhang, Wei; Song, Jiangao; De Ughetta; Brown, Lesley; Walkinshaw, Gail

PATENT ASSIGNEE(S): Galileo Laboratories, Inc., USA

SOURCE: PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
WO 2003064403	A1	20030807	WO 2003-US2766	20030130			
W: AE, AG,	AL, AM, AT	Γ, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,			
CO, CR,	CU, CZ, DE	E, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,			
GM, HR,	HU, ID, II	L, IN, IS,	JP, KE, KG, KP, KR,	KZ, LC, LK, LR,			
LS, LT,	LU, LV, MA	A, MD, MG,	MK, MN, MW, MX, MZ,	NO, NZ, OM, PH,			
PL, PT,	RO, RU, SC	C, SD, SE,	SG, SK, SL, TJ, TM,	TN, TR, TT, TZ,			
UA, UG,	UZ; VC, VN	N, YU, ZA,	ZM, ZW				
RW: GH, GM,	KE, LS, MW	W, MZ, SD,	SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,			
KG, KZ,	MD, RU, TJ	J, TM, AT,	BE, BG, CH, CY, CZ,	DE, DK, EE, ES,			
FI, FR,	GB, GR, HU	U, IE, IT,	LU, MC, NL, PT, SE,	SI, SK, TR, BF,			
BJ, CF,	CG, CI, CM	M, GA, GN,	GQ, GW, ML, MR, NE,	SN, TD, TG			
CA 2474871	A1	20030807	CA 2003-2474871	20030130			
AU 2003207750	A2	20030902	AU 2003-207750	20030130			
EP 1478634	Al	20041124	EP 2003-705988	20030130			
R: AT, BE,	CH, DE, DK	K, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,			
· IE, SI,	LT, LV, FI	I, RO, MK,	CY, AL, TR, BG, CZ,	EE, HU, SK			
NZ 534305	Α	20051028	NZ 2003-534305	20030130			
JP 2006502963	T	20060126	JP 2003-564026	20030130			
PRIORITY APPLN. INFO	).;		US 2002-353939P	P 20020131			
			WO 2003-US2766	W 20030130			
OTHER SOURCE(S):	MARPAT	Г 139:17996	55				

OTHER SOURCE(S): MARPAT 139:179965

GI

$$0$$
 $R^{1}$ 
 $Y-R^{3}$ 
 $R^{2}-X$ 
 $I$ 

Title compds. I [wherein R1 = CO2R', CONR'R'', CH2OR''', CN, AΒ (un) substituted heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl; R2, R3 = independently (un) substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, nucleoside, amino acid, di-, tri- or tetra-peptide; R4 = H, alkyl, alkylcarbonyl, (poly) alkoxyalkylene, dialkoxyphosphoryloxy; X = alkylene, NR', S, SO, SO2; or XR2 = PO(OR')2; Y = NR', S, SO, SO2; or YR3 = PO(OR')2; or XR2YR3= (un) substituted aliphatic or aromatic ring; R' = H, alkenyl, (un) substituted alkyl, cycloalkyl, phosphoryl, aryl; R'' = H, alkenyl, (un) substituted alkyl, aryl; or R'R'' = atoms that form (un) substituted 5-7 membered aryl, heteroaryl ring; R''' = H, alkenyl, (un) substituted alkyl, acyl, cycloalkyl, phosphoryl, aryl; with the proviso that the compound is not 4-hydroxy-3-methanylsulfonyl-2-methanylsulfonylmethyl-5-oxo-2,5dihydrofuran-2-carboxylic acid Et ester; and further with the proviso that when X = alkylene,  $R2 \neq (un)substituted alkyl; and their single$ tautomers, single stereoisomers, mixts. of tautomers and/or stereoisomers, and pharmaceutically acceptable salts] were prepared as cytoprotectants for neuroinflammation and neurodegenerative disorders. For example, II was prepared by reaction of 2-mercaptobenzimidazole with Et bromopyruvate in ethanol/acetone and aldol condensation of the two tautomeric forms of the pyruvate intermediate. Selected invention compds. showed significant reduction in edema in assays assessing mouse ear inflammatory response to topical arachidonic acid (10% to 70%, p < 0.05). Results from neuronal cell stress assay, myocyte calcium-contractility assay, and rat middle cerebral artery occlusion model were disclosed for selected invention compds. Thus, I and their pharmaceutical formulations are useful in the treatment of stroke, cerebral ischemia, myocardial infarction, myocardial ischemia, chronic heart failure, inflammation and other oxidative stress-related conditions, and Alzheimer's disease and senile dementia (no data). 577953-28-7P, 4-Hydroxy-5-oxo-3-(7-trifluoromethylquinolin-4-IT ylsulfanyl) -2-[(7-trifluoromethylquinolin-4-ylsulfanyl)methyl]-2,5dihydrofuran-2-carboxylic acid ethyl ester RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

ΙI

(Uses)

(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of neuroinflammation and neurodegenerative disorders)

RN 577953-28-7 CA

CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[[7-(trifluoromethyl)-4-quinolinyl]thio]-2-[[[7-(trifluoromethyl)-4-quinolinyl]thio]methyl]-, ethyl ester (CA INDEX NAME)

3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
10/773803
L16 ANSWER 10 OF 22 CA COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                          139:53304 CA
TITLE:
                          Preparation of tyrosylpiperazine derivatives as P2X7
                          receptor antagonists
                          Jacobson, Kenneth A.
INVENTOR(S):
                          Department of Health and Human Services, USA
PATENT ASSIGNEE(S):
SOURCE:
                          PCT Int. Appl., 67 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                       DATE
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                              ______
                          ----
                           A2
                                  20030612
                                              WO 2002-US38126
                                                                       20021127
     WO 2003047515
     WO 2003047515
                                  20040108
                           Α3
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002359524
                           A1
                                  20030617
                                              AU 2002-359524
                                                                       20021127
PRIORITY APPLN. INFO.:
                                              US 2001-334130P
                                                                    P 20011130
                                                                   W 20021127
                                              WO 2002-US38126
OTHER SOURCE(S):
                          MARPAT 139:53304
     Disclosed are antagonists of the P2X7 receptor in an animal, e.g.,
     tyrosylpiperazine derivs. (S)-p-R2OC6H4CH2CH(NR1R4)CO-NC4H8N-R3 [NC4H8N is
     piperazine; R1-R3 are sulfonyl or carbonyl groups, e.g., alkyl- or
     arylsulfonyl or -carbonyl; R4 is H or alkyl], which may be monomeric or
     dimeric. Pharmaceutical compns. comprising one or more of these
     antagonists are used to block an ATP-induced toxic process in the blood
     cell of an animal, e.g., in the treatment or prevention of septic shock,
     inflammation, stroke or neurodegenerative disease. Thus,
     [N,O-bis(quinolinesulfonyl)-L-tyrosyl]-Boc-piperazine (Boc =
     tert-butoxycarbonyl) was prepared by sulfonylation of L-tyrosyl-Boc-
     piperazine and showed 77 ± 20 % inhibition of ATP-induced K+ release
     and IC50 .apprx. 40 nM as antagonist of P2X7 receptor-mediated ion flux.
IT
     410522-80-4P
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
```

(preparation of tyrosylpiperazine derivs. as P2X7 receptor antagonists)

1-Piperazinecarboxylic acid, 4-[(2S)-1-oxo-2-[(8-quinolinylsulfonyl)amino]-3-[4-[(8-quinolinylsulfonyl)oxy]phenyl]propyl]-, 1,1-dimethylethyl ester

Absolute stereochemistry.

(CA INDEX NAME)

410522-80-4 CA

RN

CN

L16 ANSWER 11 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

136:151082 CA

TITLE:

Preparation of aminopiperidine quinolines and their azaisosteric analogs having antibacterial activity Davies, David Thomas; Jones, Graham Elgin; Lightfoot, Andrew P.; Markwell, Roger Edward; Pearson, Neil David

Smithkline Beecham P.L.C., UK PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 80 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

						KIND DATE			APPLICATION NO.									
	2002															20010	725	
											, BG,							
											Es,							
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG	, KP,	KR,	KZ,	ĽC,	LK	, LR,	LS,	
											, мх,							
											, TR,							
•		VN,	YU,	ZA,	ZW													
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZW,	AT,	BE	, CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT	LU,	MC,	NL,	PT,	SE	, TR,	BF,	
		ВJ,									, ML,							
CF	4 2417	192			A1		2002	0131		CA	2001- 2001-	2417	192		:	20010	725	
EI	1305	308			Al		2003	0502		ΕP	2001-	9695	09		:	20010	725	
E	1305	308			В1		2006	1220										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE	, MC,	PT,	
											, TR							
BF	2001	0127	50		Α		2003	0909		BR	2001-	1275	0		:	20010		
JI	2004	5043	97		${f T}$		2004	0212		JΡ	2002-	5141	30		:			
N2	2 5237	49			Α		2005	0324		ΝZ	2001- 2003- 2001-	5237	49			20010	-	
И	J 2003	0007	21		A2		2005	0829		HU	2003-	721				20010		
AT	3488	26			Т		2007	0115		ΑT	2001-	9695	09		:	20010		
ES	Z 5237 J 2003 T 3488 G 2278	778			T3						2001-							
$\mathbf{z}_{I}$	1 2003	0005	89		Α		2004	0422		ZA	2003-	589			:	20030	122	
	2003										2003-							
	2003										2003-							
II	2003	MN00	103		A					IN	2003-	MN10	3					
US	2004	0389	98		Al		2004			US	2003-	3338	29			20030	828	
U.S	0902	<b>J</b> 1			DZ		2005											
	2006				Al		2006	0119			2005-					20050		
PRIORIT	Y APP	LN.	INFO	. :							2000-							
											2001-					20010		
										WO	2001-	E586	04		W :	20010		
<u> </u>	OUDGE	(0)			M 7 T 1	ח מר	126	1 = 1 0 4		US	2003-	3338	29	•	A3	20030	828	

OTHER SOURCE(S):

MARPAT 136:151082

GI

dioxalate

II

Aminopiperidine quinoline compds. I (Z1-Z5 = one is N, one (or two independently are) CR1a and the remainder are CH; R1 and R1a = independently are H, OH, NH2, CONH2, halogen, (un)substituted S and SO2, (un)substituted alkyl and alkoxy, etc.; R2 = H, (un)substituted alkyl or alkenyl; R3 = H, CO2H, (un)substituted amino, etc.; R4 = CO, SO2, CH2 attached to an optionally substituted bicyclic, carbocyclic or heterocyclic ring system; n = 0-1; AB = substituted N or C), their salts and pharmaceutically acceptable derivs. were prepared and found to be useful in treating bacterial infections in mammals, especially humans. Thus II was prepared from 4-amino-1-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)]ethylpiperidine and 5-bromo-1H-indole-2-carboxaldehyde and was determined to have an MIC less than or equal to 32μg/mL against one or more of gram pos. and neg. bacteria such as S. aureus Oxford and WCUH29 and S. pneumoniae 1629, N1387 and ERY 2.

IT 394223-36-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminopiperidine quinolines and their azaisosteric analogs having antibacterial activity)

RN 394223-36-0 CA

CN 4-Piperidinamine, N-[(8-hydroxy-2-quinolinyl)methyl]-1-[(6-methoxy-4-quinolinyl)acetyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{N} \\ \text{OH} \\ \text{N} \\ \text{CH}_2 \\ \text{N} \\ \text{CH}_2 \\ \text{OH} \\ \text{OH}$$

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 12 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 135:5625 CA

TITLE: Diabetic remedy containing dipiperazine derivative

INVENTOR(S): Yamaguchi, Hiroshi; Maruta, Katsunori; Nagata, Ryu;

Ushiroda, Kantaro; Iwai, Kiyotaka

PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE: PCT Int. Appl., 176 pp.

CODEN: PIXXD2

MARPAT 135:5625

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

OTHER SOURCE(S):

GI

APPLICATION NO. PATENT NO. KIND DATE ---------\_ \_ \_ \_ \_ \_ \_ \_\_\_\_\_\_ 20010525 WO 2000-JP8065 20001115 WO 2001036386 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: JP 1999-326751 A 19991117

Y1 Y3

A remedy for diabetes contains a dipiperazine derivative represented by AB formula (I) or a pharmacol. acceptable salt thereof. [wherein Ar1 and Ar2 each represents optionally substituted Ph, naphthyl, or heterocyclyl; A1 and A2 each represents optionally substituted alkylene or carbonyl (provided that not both of A1 and A2 are carbonyl); A represents methylene or ethylene; Y1, Y2, Y3, and Y4 each represents hydrogen or alkyl; L represents -L3-X1-L1-X2-L2-X3-L4-; L3 and L4 each represents carbonyl or sulfonyl; X1 and X3 each represents a single bond, NR1, or O; R1 represents hydrogen or alkyl; X2 represents a single bond, optionally substituted alkylene, heteroarylene, phenylene, or cycloalkylidene, cycloalkylene, divalent aliphatic heterocyclic group, vinylene, ethynylene, S, O, NR2CO, NR3CONR4, NR2CO2, OCO2, O2C, CO, or N(COR5); etc.; R2, R3, R4, and R5 each represents hydrogen or alkyl; and L1 and L2 each represents a single bond, optionally substituted alkylene, vinylene, or phenylene; provided that when X2 is single bond, vinylene, ethynylene, S, O, NR2CO, NR3CONR4, NR2CO2, OCO2, O2C, CO, or N(COR5), L1 or L2 is not a single bond; or when L1 or L2 is vinylene, X1 and X3 are a single bond]. These compds. lower blood sugar level and improve insulin resistance. Thus, 110 mg N-[4-(1-piperazinylcarbonyl)phenyl]-1-piperazinecarboxamide

IT

CN

(preparation given) was dissolved in 6 mL DMF, treated with 195 mg K2CO3 and 270 mg 4-(trifluoromethyl)benzyl bromide, and stirred at 50° for 5 h to give 4-[4-(trifluoromethyl)benzyl]-N-[4-[4-[4-(trifluoromethyl)benzyl]-1-piperazinyl]carbonyl]phenyl]-1-piperazinecarboxamide (II). II was administered to mice at 3 mg/kg p.o., immediately followed by insulin 3 U/kg s.c. After 4 h, the blood sugar level lowered from 261 $\pm$ 92 (control) to 129 $\pm$ 43 mg/dL. 340757-60-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dipiperazine derivs. as hypoglycemics and antidiabetics for improving insulin resistance)

RN 340757-60-0 CA

1-Piperazinecarboxamide, 4-(2-quinolinylmethyl)-N-[3-[[4-(2-quinolinylmethyl)-1-piperazinyl]carbonyl]phenyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 13 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

133:150464 CA

TITLE:

Preparation of quinolinylindole derivatives and

compositions in use as antimicrobial agents

INVENTOR(S):

Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam; Melikian-Badalian, Anita; Rossi, Richard F.; Xie,

Roger L.

PATENT ASSIGNEE(S):

Sepracor, Inc., USA

SOURCE:

U.S., 228 pp., Cont.-in-part of U.S. Ser. No. 99,640.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

7

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPL	ICATION I	NO.	DATE				
US 6103905 US 6207679 US 6172084 WO 2000034		B1 B1	20000815 20010327 20010109 20000615	US 1	 998-2133 998-4505 998-9964		19980319				
WO 2000034			20000013	WO I	999-0526		17771203				
CZ IN MD SK RW: GH DK		DM, EE, KE, KG, MN, MW, TM, TR, LS, MW, FR, GB, GA, GN,	ES, FI, KP, KR, MX, NO, TT, TZ, SD, SL, GR, IE,	GB, GD, KZ, LC, NZ, PL, UA, UG, SZ, TZ, IT, LU, MR, NE, US 2 US 1 US 1	GE, GH, LK, LR, PT, RO, UZ, VN, UG, ZW, MC, NL, SN, TD,	GM, LS, RU, YU, AT, PT, TG 90 81	HR, H LT, I SD, S ZA, Z BE, G SE, H	HU, ID, LU, LV, SE, SG, ZW CH, CY, 3F, BJ, 20000 2 19970	IL, MA, SI, DE, CF, 908 619 319		
000000000000000000000000000000000000000	,	W3.D.D.J.M.	122 1504	US 2	998-2133 000-6396			19981 2 20000			
OTHER SOURCE(S)	:	MARPAT	133:1504	64							

GI

Title compds. [I; Q = hydrophobic group, H; X = heterocyclyl, amidinyl, formamidonyl, guanidinyl, CN, CSNR2, OR, SR; Z = CC, (E)-CH:CH, (Z)-CH:CH, (CH2)2; L = hydrophobic group, H; R represents independently for each occurrence = H, alkyl, heteroalkyl, aryl, heteroaryl, acyl, sulfonyl; R1 = H, alkyl, aryl, 4-CH3C6H4SO2, (CH2)d; d = 1-6; R2 = H, alkyl, aryl; R3 = H, alkyl, aryl; m = 1-8; n = 1-4] and pharmaceutical prepns. using title compds. are prepared as antimicrobial agents. The MIC value of I against at least one Gram-pos. bacterium ranged from 0.1-10  $\mu$ g/mL. Thus, the title compound II was prepared and has a therapeutic index in primates of at least 10 for the inhibition of infection by at least one Gram-pos. bacterium.

IT 218463-49-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of quinolinylindole derivs. as antimicrobial agents)

RN 218463-49-1 CA

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 14 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 132:44824 CA

TITLE: Partition coefficients (free ligands and their

iron(III) complexes) and lipophilic behavior of new abiotic chelators. Correlation to biological activity Thomas, F.; Baret, P.; Imbert, D.; Pierre, Jean-Louis;

AUTHOR(S): Thomas, F.; Baret, Serratrice, G.

CORPORATE SOURCE: Laboratoire de Chimie Biomimetique (LEDSS, UMR CNRS

5616), Universite Joseph Fourier, Grenoble, 38041, Fr.

SOURCE: Bioorganic & Medicinal Chemistry Letters (1999),

9(20), 3035-3040

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Partition coeffs. between n-octanol and water have been measured for ten tripodal ligands with catecholate or hydroxyquinolinate or

pyridinophenolate chelating subunits and for their iron(III) complexes. The abilities of the ligands to cross an octanol phase and to extract ferric ion from its EDTA complex in an aqueous phase are studied. Correlation with

biol. properties are discussed.

IT 169209-67-0, O-Trenox

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(partition coeffs. (free ligands and iron(III) complexes) and

lipophilic behavior of new abiotic chelators and correlation to biol.

activity)

RN 169209-67-0 CA

CN 7-Quinolinecarboxamide, N,N',N''-(nitrilotri-2,1-ethanediyl)tris[8-hydroxy-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 15 OF 22 CA COPYRIGHT 2007 ACS on STN.

ACCESSION NUMBER: 130:52328 CA

Preparation of indole derivatives as antagonists of TITLE:

gonadotropin releasing hormone

INVENTOR (S): Goulet, Mark; Wyvratt, Matthew J., Jr.; Chu, Lin;

Girotra, Narindar N.; Lin, Peter

Merck & Co., Inc., USA PATENT ASSIGNEE(S):

PCT Int. Appl., 84 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	PATENT NO.								APPLICATION NO.						DATE				
- W								1998								1:	9980	601	
								BB,											
								KG,											
								RO,											
								AZ,											
		RW:						SD,								DE,	DK,	ES,	
								IT,											
								NE,											
บ	JS	6156	767			Α		2000	1205	1	US 1	998-	8347	7		1	9980	522	
		2292				A1		1998											
A	U	9878	071			Α		1998	1221		AU 1	998-	7807	1		1	9980	601	
A	U	7288	11			B2		2001	0118										
E	EΡ	9947	08			A1		2000	0426		EP 1	998-	9261	73 ·		1	9980	601	
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙE,	FI
J	ΙP	2002	5024	28		T		2002	0122	1	JP 1	999-	5027	17		1	9980	601	
PRIORI											US 1	997-	4863	8 P		P 1	9970	605	
												997-							
											GB 1	997-	1984	0	1	A 1	9970	918	
												998-							
											WO 1	998-	US11	208	Ţ	W 1	9980	601	
OTHER	SO	URCE	(S):			MAR	PAT	130:	5232	8									

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- There are disclosed novel indole compds. I [A = (un) substituted alkylene, AB cycloalkylene, alkenylene, alkynylene, bind, etc; R0 = H, (un) substituted alkyl, aryl, or aralkyl; R1 = various (un) substituted and mostly N-containing mono- and bicyclic heterocycles; R2 = (un) substituted heteroaryl or heteroaralkyl; or R2A may form 5- to 7-membered ring; R3, R4, R5 = H, (un) substituted alk(en)yl, aryl, or aralkyl, CN, nitro, perfluoroalkyl, halo, etc.; or R3R4 may form C3-7 carbocycle or an NOS-heterocycle; R6 = H, (un) substituted alkyl or aryl, perfluoroalkyl, CN, NO2, halo, etc.; R7 = H, (un) substituted alkyl, or is absent if X = H or halo; R8 = H, CO2H or derivs., NH2 or derivs., OH or derivs., SH or derivs.; or R7R8 forms (un) substituted NOS-heterocycle, C3-7 carbocycle, or oxo; R9, R9', R10, R10' = H, (un) substituted alkyl, aryl, or aralkyl; or R9R9' and/or R10R10' forms C3-7 carbocycle or oxo; addnl. rings possible; X = N, O, S(0)0-2, CO, (CH2)p or derivs., bond, (un) substituted alkenylene or alkynylene; m = 0-3; p = 0-4] and pharmaceutically acceptable salts thereof. The compds. are useful as antagonists of GnRH (no data), and as such may

GΙ

with

be useful for the treatment of a variety of sex-hormone related and other conditions in both men and women. Fourteen such compds. were prepared and claimed, and a variety of intermediates were prepared For instance, Et 2-(4-hydrazinophenyl)-2-methylpropionate (preparation given) was cyclized with 3-chloropropyl 3,5-dimethylphenyl ketone to give a 2-[3-(2-aminoethyl)indol-5-yl]propionate derivative, which underwent a sequence of sidechain N-BOC protection, alkaline saponification of the Et ester, amidation

7-azabicyclo[2.2.1]heptane-HCl, acidic deprotection, and double reductive alkylation of the resultant sidechain amine with pyridin-3-ylacetaldehyde and NaBH3CN, to give the title compound II.

IT 217315-59-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(invention compound; preparation of indole derivs. as non-peptide GnRH antagonists)

RN 217315-59-8 CA

CN 7-Azabicyclo[2.2.1]heptane, 7-[2-[3-[2-[bis[4-(7-chloro-4-quinolinyl)butyl]amino]ethyl]-2-(3,5-dimethylphenyl)-1H-indol-5-yl]-2-methyl-1-oxopropyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 16 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 129:343722 CA

Preparation of heterocyclic amino acid hydrazides as TITLE:

protease inhibitors

INVENTOR(S): Halbert, Stacie Marie; Michaud, Evelyne; Thompson,

Scott Kevin; Veber, Daniel Frank

Smithkline Beecham Corp., USA PATENT ASSIGNEE(S):

PCT Int. Appl., 152 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
WO	9848	 799			A1		1998	1105		WO	1998-	US87	40			19980	)429		
	W:	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN,	CZ	, EE,	GE,	HU,	ID,	IL	, IS	JP,		
		KP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK	, MN,	MX,	NO,	ΝZ,	PL	, RO	SG,		
											, YU,								
		RU,	TJ,	TM															
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	zw	, AT,	BE,	CH,	CY,	DE	, DK	ES,		
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL	, PT,	SE,	BF,	ВJ,	CF	, CG	CI,		
							NE,												
ZA	9803	522			Α		1998	1029		ZA	1998-	3522				19980	1428		
CA	2287	989			A1		1998	1105		CA	1998-	2287	989			19980	1429		
AU	9873	651			Α		1998	1124		ΑU	1998-	7365	1			19980	1429		
TR	9902	703			T2		2000	0221		TR	1999-	2703				1998	1429		
BR	9809	333			Α		2000	0704		BR	1998-	9333				19980	)429		
EP											1998-								
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE	, MC	PT,		
		ΙE,	SI,	FI															
HU	2000	0012	94		A2		2001	0428		HU	2000-	1294				1998	1429		
	2000						2001	0628											
JP	2002	5040	97		T		2002	0205		JP	1998-	5473	89			1998			
NO	9905	268			Α		1999	1115			1999-					1999	L028		
MX	9909	976			Α		2000	0430		MX	1999-	9976				1999	L028		
US	2002	0493	16		A1		2002	0425			2001-					2001			
PRIORIT	Y APP	LN.	INFO	. :						US	1997-	4506	7P .		Ρ	19970	0429		
•										WO	1998-	US87	40	1	W	1998	0429		
										US	1999-	4230	59		В1	1999	L029		
OTHER S	OURCE	(S):			MAR	PAT	129:	3437	22										

GI

$$R^{3} \xrightarrow{N} \xrightarrow{N} \xrightarrow{X} \xrightarrow{Z} \xrightarrow{L} \qquad Q = \xrightarrow{Z} \xrightarrow{L}$$

$$EtO_{2}C \xrightarrow{N} \xrightarrow{N} \xrightarrow{N} \qquad Q$$

$$Me_{2}CHCH_{2} \xrightarrow{N} \xrightarrow{N} \xrightarrow{N} \xrightarrow{N} \xrightarrow{N} \xrightarrow{N} \qquad Q$$

The present invention provides compds. I [L = C2-6 alkyl, Ar-C0-6 alkyl, AB Het-CO-6 alkyl, CHR4NR5R6, CHR4Ar, CHR4OAr, NR4R7; Ar = (un)substituted Ph, (un) substituted naphthyl; Het = (un) substituted 5-7-membered monocyclic or 7-10-membered bicyclic heterocycle; W = CO, SO2; X, Y, Z = independently N, O, S, CR10; R, R1, R2, R5, R10, R12 = independently H, C1-6 alkyl, C2-6 alkenyl, Ar-C0-6 alkyl, Het-C0-6 alkyl; R3 = C3-6 alkyl, Ar, Het, CHR11Ar, CHR11OAr, NR11R12, CHR11NR12R13, heterocycle Q; R4, R11, R15 = independently any group R, C3-6 cycloalkyl-C0-6 alkyl; R7 = any group R4 except H; R4R7 form (un) substituted 3-7 membered monocyclic or 7-10 membered bicyclic ring; R6, R13 = independently R14, R14CO, R14CS, R1402C, R1402CNR9CHR15CO; R14 = any group R except H], which inhibit proteases, including cathepsin K, pharmaceutical compns. of such compds., and methods for treating diseases of excessive bone loss or cartilage or matrix degradation, including osteoporosis; gingival disease including gingivitis and periodontitis; arthritis, more specifically, osteoarthritis and rheumatoid arthritis; Paget's disease; hypercalcemia or malignancy; and metabolic bone disease therewith. Thus, addition of cis-2,6-dimethylmorpholine with benzoyl isothiocyanate, followed by hydrolysis of the resulting benzoylthiourea and cyclocondensation with Et bromopyruvate, gave thiazole II. Conversion of II into the corresponding hydrazide with N2H4 and condensation with N-(4-pyridinylmethoxycarbonyl)-Lleucine gave hydrazide III. Prepns. for 195 addnl. hydrazides are also given.

Me

III

IT 215521-28-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic amino acid hydrazides as protease inhibitors)

RN 215521-28-1 CA

CN 4-Thiazolecarboxylic acid, 2-(8-quinolinyl)-, 2-[(2S)-4-methyl-1-oxo-2-[(8-quinolinylcarbonyl)amino]pentyl]hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

5

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L16 ANSWER 17 OF 22

ACCESSION NUMBER:

128:93188 CA

TITLE:

Preparation and formulation of substituted

piperidineamines as p antagonists for treating social

INVENTOR(S):

Struck, Michael; Vassout, Annick; Katz, Richard; Bennett, Deborah; Kramer, Lynn; Hauser, Kathleen Novartis A.-G., Switz.; Struck, Michael; Vassout,

PATENT ASSIGNEE(S):

Annick; Katz, Richard; Bennett, Deborah; Kramer, Lynn;

Hauser, Kathleen

SOURCE:

PCT Int. Appl., 69 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 9745119	Al 19971204	WO 1997-EP2481	19970515
W: AL, AM, AT,	AU, AZ, BA, BB,	BG, BR, BY, CA, CH,	CN, CU, CZ, DE,
		HU, IL, IS, JP, KE,	
LC, LK, LR,	LS, LT, LU, LV,	MD, MG, MK, MN, MW,	MX, NO, NZ, PL,
PT, RO, RU,	SD, SE, SG, SI,	SK, TJ, TM, TR, TT,	UA, UG, US, UZ,
VN, YU, AM,	AZ, BY, KG, KZ,	MD, RU, TJ, TM	
RW: GH, KE, LS,	MW, SD, SZ, UG,	AT, BE, CH, DE, DK,	ES, FI, FR, GB,
GR, IE, IT,	LU, MC, NL, PT,	SE, BF, BJ, CF, CG,	CI, CM, GA, GN,
ML, MR, NE,	SN, TD, TG		
AU 9728982	A 19980105	AU 1997-28982	19970515
PRIORITY APPLN. INFO.:		US 1996-18336P	P 19960524
		WO 1997-EP2481	W 19970515
OTHER SOURCE(S):	MARPAT 128:9318	8	

GΙ

$$R^{1}-N$$
  $X^{2}-N-X^{3}-R^{4}$   $R^{2}-X^{1}$   $I$ 

The invention relates to the use of substituted piperidineamines I or of a AB pharmaceutically utilizable salt thereof, in which R1 is an unsubstituted or substituted aralkyl, aryloxyalkyl, heteroaralkyl, aroyl, heteroaroyl, cycloalkylcarbonyl, aralkanoyl, heteroarylalkanoyl, aralkoxycarbonyl or arylcarbamoyl radical or the acyl radical of an  $\alpha$ -amino acid which is unsubstituted or N-substituted by lower alkanoyl or carbamoyl-lower-alkanoyl; R2 is cycloalkyl or an unsubstituted or substituted aryl or heteroaryl radical; R3 is hydrogen, alkyl, carbamoyl or an alkanoyl or alkenoyl radical which is unsubstituted or substituted by carboxyl or esterified or amidated carboxyl; R4 is an unsubstituted or substituted aryl or unhydrogenated or partially hydrogenated heteroaryl radical; X1 is methylene, ethylene, a direct linkage, a carbonyl group which may be ketalized, or an unetherified or etherified hydroxymethylene group; X2 is alkylene, carbonyl or a direct linkage; and X3 is carbonyl, oxo-lower-alkylene, oxo(aza)-lower-alkylene or an alkylene radical which is unsubstituted or substituted by Ph,

hydroxymethyl, carboxyl which may be esterified or amidated, or by hydroxyl in a position higher than  $\alpha$ ; for producing pharmaceutical products for the treatment of social phobia. Thus, the preparation and formulation of (2R,2S)-2-benzyl-1-(2-naphthoyl)-N-(4-quinolylmethyl)-4-piperidineamine as p antagonists for treating social phobia, are reported.

IT 150705-60-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and formulation of substituted piperidineamines as p antagonists for treating social phobia)

RN 150705-60-5 CA

CN 4-Piperidinamine, 2-(phenylmethyl)-1-(2-quinolinylcarbonyl)-N-(4-quinolinylmethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L16 ANSWER 18 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

125:292574 CA

TITLE:

Synthesis and pharmacological properties of

new heterocyclic and aromatic amides of glycyrrhizic

acid

AUTHOR (S):

Baltina, L. A.; Vasil'eva, E. V.; Davydova, V. A.; Ismagilova, A. F.; Zarudii, F. S.; Tolstikov, G. A.

CORPORATE SOURCE:

Institut Organicheskoi Khimii, Russia

SOURCE:

Khimiko-Farmatsevticheskii Zhurnal (1996), 30(8),

14-16

CODEN: KHFZAN; ISSN: 0023-1134

PUBLISHER:

Izdatel'stvo Folium

DOCUMENT TYPE:

Journal

LANGUAGE:

Russian

AB Six title amides were prepared by acylation of the corresponding biogenic amines with glycyrrhizic acid in the presence of N,N'-dicyclohexylcabodiimide, which made it possible to use the unprotected glycoside and polyfunctional amines. The compds. thus obtained showed anti-inflammatory and antiulcer activities.

IT 170277-51-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and anti-inflammatory and antiulcer activity of glycyrrhizic acid amides)

RN 170277-51-7 CA

CN  $\alpha$ -D-Glucopyranosiduronamide,  $(3\beta,20\beta)$ -11,29-dioxo-29-(3-quinolinylamino)olean-12-en-3-yl N-3-quinolinyl-2-O-(N-3-quinolinyl- $\beta$ -D-glucopyranuronamidosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

\_OH

....ОН

PAGE 2-A

Me

L16 ANSWER 19 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 124:8801 CA

TITLE: Substituted indole-, indene-, pyranoindole- and

tetrahydrocarbazolealkanoic acid derivatives as

inhibitors of PLA2 and lipoxygenase

INVENTOR(S):
Musser, John H.; Kreft, Anthony F., III; Failli,

Amedeo A.; Demerson, Christopher A.; Shah, Uresh S.;

Nelson, James A.

PATENT ASSIGNEE(S): American Home Products Corporation, USA

SOURCE: U.S., 35 pp. Cont.-in-part of U.S. 5,229,516.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	r no.	KIND	DATE	API	PLICATION NO.		DATE
						-	
US 542	20289	A	19950530	US	1993-29199		19930310
CA 209	90042	A1	19910428	CA	1990-2090042		19901027
US 522	29516	A	19930720	US	1992-911434		19920710
PRIORITY A	PPLN. INFO.:			US	1989-428260	B2	19891027
				US	1990-596134	B2	19901011
				US	1992-911434	A2	19920710
				CA	1990-2070422	Α3	19901027
OTHER SOURC	CE(S):	CASREA	CT 124:8801;	MAI	RPAT 124:8801		

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

This invention relates to substituted indole derivs. A(CH2)nOB wherein A = AB I or II wherein R1 is hydrogen, lower alkyl, Ph or Ph substituted with trifluoromethyl; R2 is hydrogen or lower alkyl; or R1 and R2 taken together form a benzene ring; R3 is hydrogen or lower alkyl; n is 1-2; B is III-VII wherein R4 is, e.g., CO2R2, m is 0-3; R5 is A(CH2)nOC6H4 or Ph or Ph substituted by halo, lower alkylthio, lower alkylsulfinyl or lower alkylsulfonyl; R6 is A(CH2)nO or halo; R7 is lower alkyl; Y is CH2 or O; R8 is lower alkyl or (CH2)mCO2R3; R9 is COR10 or (CH2)oR10, o is 1-4; R10 is lower alkyl, Ph, Ph substituted with carboxy, halo, lower alkyl, loweralkylthio or loweralkylsulfinyl; naphthyl, pyridyl, furanyl, quinolinyl, or 2-R14-thiazolyl; R11 is lower alkyl or phenyl; R12 is hydrogen or loweralkylcarbonyl R13 is hydrogen, hydroxy, lower alkyl or lower alkoxy; R14 is Ph or halophenyl; Z2 is hydrogen, lower alkyl or N(CH3)OH; and the pharmacol. acceptable salts thereof possessing lipoxygenase inhibitory, phospholipase A2 inhibitory and leukotriene antagonist activity, which are useful as anti-inflammatory, antiallergic and cytoprotective agents. Thus, e.g., condensation of 2-methyl-5-(2-quinolinylmethoxy)indene-3-acetic acid Et ester (preparation given, mixture of endo and exo isomers) with p-chlorobenzaldehyde afforded 3-[(4-chlorophenyl)methylene]-2-methyl-6-(2-quinolinylmethoxy)-3H-indene-1acetic acid [VIII, Q = 2-quinolinylmethyl, mixture of Z (major) and E (minor) isomers]. The specificity of action of PLA2 inhibitors can be determined by the activity of test compds. to inhibit the synthesis of LTB4 by rat glycogen-elicited polymorphonuclear leukocytes (PMN) in the presence of exogenous substrate: VIII demonstrated 96% inhibition at 10 mM. VIII also inhibited the synthesis of the arachidonic acid cyclooxygenase oxidation product PGE2 with 81% inhibition at 10 mM. VIII inhibited the release of

arachidonic acid from an arachidonic acid-containing substrate by the action of phospholipase A2 enzyme from human synovial fluid with IC50 = 9.7 mM. Further assays demonstrated that the compds. of the invention exerted an inhibitory effect on both the lipoxygenase pathway and the cyclooxygenase pathway and have significant leukotriene (LTD4) antagonist activity. The compds. of the invention inhibited the acute inflammatory response and inhibited 5-lipoxygenase in human whole blood.

IT 135872-81-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(substituted indole-, indene-, pyranoindole- and tetrahydrocarbazolealkanoic acid derivs. as inhibitors of PLA2 and lipoxygenase)

RN 135872-81-0 CA

CN 1H-Indole-3-carboxylic acid, 2-methyl-5-(2-quinolinylmethoxy)-1-(2-quinolinylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 20 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 49:17153 CA ORIGINAL REFERENCE NO.: 49:3397g-i

TITLE: Cardiovascular and oxytocic actions of a new series of

quinoline derivatives

AUTHOR(S): Kamijo, Kazuya; Koelle, George B. CORPORATE SOURCE: Univ. of Pennsylvania, Philadelphia

SOURCE: Journal of Pharmacology and Experimental Therapeutics

(1954), 112, 444-61

CODEN: JPETAB; ISSN: 0022-3565

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The cardiovascular and oxytocic actions of compds. related to quinoline were investigated (details of methods given). A series of ten 3-quinolinecarboxamide derivs. with groups of diverse complexity in the side chain showed little activity of either type. A series of eight 1,2,3,4-tetrahydro-3-quinolinecarboxamide derivs. with various groups substituted on the amide N and Me or Et on the ring N had slight hypotensive activity of brief duration but were relatively strong oxytocics. A series of halide salts of thirteen 3-carbamoylquinolinium derivs. with groups of diverse complexity substituted on the amide N and Me or Et on the quaternary ring N possessed relatively strong hypotensive activity but no oxytocic activity. The most active of these, 1-methyl-3-[N-(1-carbethoxyethyl)carbamoyl]quinolinium iodide, was studied in detail.

RN 875229-02-0 CA

CN Piperazine, 1,4-bis(3-quinolinylcarbonyl) - (9CI) (CA INDEX NAME)

L16 ANSWER 21 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 31:10421 CA

ORIGINAL REFERENCE NO.: 31:1408h-i,1409a-b

TITLE: Derivatives of quinolineca. I. Nuperine analogs. I

AUTHOR(S): Smith, M. E.; Pollard, C. B.

SOURCE: Journal of the American Chemical Society (1937), 59,

131-2

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AΒ 2-Chlorocinchoninyl chloride (I) and piperazine hexahydrate in C6H6 give 85% of N,N'-bis(2-chlorocinchoninyl)piperazine, does not m. under 300° (all m. ps. corrected); phenylpiperazine gives 95% of the N-Ph derivative (II), m. 189.2-90.2°; with Na alcoholates the following 2-alkoxy derivs. of II were prepared: 2-MeO, m. 149.5-50.2° (quant. yield); 2-EtO, m. 154-4.5° (quant. yield); 2-PrO derivative, m. 102.8-3.3° (52% yield); 2-iso-PrO derivative, m. 116.2-17.2° (66% yield); 2-BuO derivative, m. 77.2-8.2° (54% yield); 2-alloxy derivative, m. 129.5-30.5° (50% yield); 2-β-methoxyethoxy derivative, m. 91.6-2.3° (41% yield); 2-N-phenylpiperazino-N'- $\beta$ -ethoxy derivative, m. 134.7-5.2° (90% yield). I and morpholine in C6H6 and aqueous Na2CO3 give a quant. yield of N-(2-chlorocinchoninyl)morpholine, m. 173.6-4.4°; 2-MeO derivative, m. 134-4.9° (65% yield); 2-EtO derivative, m.  $60-9.8^{\circ}$  (56% yield), has a pronounced anesthetic action when tested on the tongue. Pharmacol. expts. are being conducted.

IT 500294-51-9P, Piperazine, 1,4-bis(2-chloro-4-quinolylcarbonyl) RL: PREP (Preparation)

(preparation of)

RN 500294-51-9 CA

CN Piperazine, 1,4-bis[(2-chloro-4-quinolinyl)carbonyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 22 OF 22 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 28:1797 CA

ORIGINAL REFERENCE NO.: 28:260e-i,261a-c

TITLE: Urea and thiourea derivatives Schonhofer, Fritz; Henecka, Hans INVENTOR(S):

PATENT ASSIGNEE(S): I. G. Farbenindustrie AG

DOCUMENT TYPE: Patent Unavailable LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE DATE PATENT NO. KIND DE 583207 19330830 DE 1931-I42360 19310819 Urea and thiourea derivs., which contain the residue of a heterocyclic or AB aromatic-heterocyclic compound containing a quaternary N atom in the nucleus, are prepared by standard processes. In typical examples, (1) 6-aminoquinoline is treated with COCl2 and the resulting urea (di-HCl salt m. 260-2°) is converted into quaternary salts m., resp.,  $235\text{-}7^{\circ}\text{, }260^{\circ}\text{, }255\text{-}7^{\circ}\text{, and }168^{\circ}\text{, with }2\text{ mols.}$ of Me2SO4, MeCl, MeI and 1 mol. of Me2SO4; 5- and 7-aminoquinoline and 3-aminoquinaldine similarly yield ureas m., resp., 284-5°, 282° and 276°, which form with Me2SO4 salts m., resp., 217°, 228°, and 193°; (2) quinoline-6-carboxylic azide (I), boiled in benzene solution with 6-methoxy-8-aminoquinoline, yields N-(quinolyl-6)-N'-(6-methoxyquinolyl-8)urea m. 229°, which forms with 1 mol. of Me2SO4 a salt m. 239°; asym. ureas are obtainable similarly from I and 1-phenyl-2,3-dimethyl-4-amino-5-pyrazolone (urea m. 242-3°, urea di-Me2SO4 salt m. 217°), N-methyl-1,2,3,4tetrahydro-6-aminoquinoline (urea m. 227°, urea di-Me2SO4 salt m. 206-7°), 6-(3'-amino-4'-toluyl)aminoquinoline (urea m. 245°, urea di-Me2SO4 salt m. 224°), 3-diethylamino-ethoxyaniline (urea m. 193°, urea di-Me2SO4 salt described), 6-p-aminophenoxyquinoline (urea m. 209°, urea di-Me2SO4 salt m. 242°), (methyl) (diethylaminoethyl) amine (di-Me2SO4 salt of the urea is described), 4-amino-3',5'-dimethyldiphenyl ether (urea m. 198°, urea Me2SO4 salt m. 234°), 5-aminoisoquinoline (di-Me2SO4 salt of the urea m. 221-2°), 7-aminoquinoline (urea m. 229°, urea-Me2SO4 salt m. 238°), and 5-chloro-8-aminoisoquinoline (urea m. 234°, urea Me2SO4 salt m. 227°); 2 mols. of I and 1 mol. of 1,2,3,4-tetrahydro-6-aminoquinoline yield N-(quinoly1-6)-N'-[1-(quinoly1-6-carbamino)-1,2,3,4-tetrahydroquinoly1-6]urea m. 160°, the di-Me2SO4 salt of which m. 187°. The following have also been obtained: N,N'-di(5-nitroquinolyl-6)urea di-MeCl, m. 242°; N, N'-di(6-methoxyquinolyl-5)urea Me2SO4 salt m. 192°; N,N'-di(8-methoxyquinolyl-6)urea Me2SO4 salt m. 194°; the Me2SO4 salt m. 211°, of the urea m. 276-7°, from 3-aminocarbolidine; the di-MeCl salt m. 100-5°, and Me2SO4 salt of N, N'-di(8-methylquinolyl-6)-thiourea m. 196°; the di-MeCl salts m., resp., 237°, 150°, and 205-6°, of the sym. thioureas m., resp., 199°, 178°, and 208°, from 6and 5-aminoquinoline and 3-aminoquinaldine; a Me2SO4 salt, decomposing 160°, of the thiourea m. 179-80°, from 7-aminoquinoline; N-(quinolyl-6)-thiourea m. 218°, and its salts, m., resp., 208-9° and 234°, with Me2SO4 and MeCl; N-(quinolyl-6) urea MeCl salt m. 240°; N,N'-di- $\dot{\gamma}$ -pyridylurea m. 208°, and Me2SO4 salt m. 191°; a nitro-N,N'-di-γ-pyridylurea di-MeCl salt; N-(quinolyl-7)-N'-(1-p-ethoxyphenylbenzimidazolyl-5)-urea m. 248°, (di-Me2SO4 salt m. 241°); N-(quinaldy1-6)-N'piperidylurea m. 160°, (mono-Me2SO4 salt m. 181°);

N-(quinolyl-6)-N'-(3-nitro-4-toluyl)urea m. 250-2°, (mono-Me2SO4 salt m. 226°); a salt m. 268-70°, of N-(quinoly1-6)-N'-(3amino-4-toluyl)urea with 1 mol. each of Me2SO4 and HCl; N-(quinolyl-6)-N'-(4-dimethylaminophenyl)urea m. 220°, and its di-MeCl salt m. 190°; a sulfate m. 150-2°, of 6-guanylcarbaminoquinoline methyl chloride; 6-quinolinecarbonyl-6'quinolylsemicarbazide, m. 230°, and its di-MeCl salt m. 252°. The salts are effective against blood parasites. IT 872275-54-2P, Urea,  $\alpha$ -6-quinolyl- $\beta$ -[1,2,3,4-tetrahydro-1-(6-quinolylcarbamyl)-6-quinolyl]-RL: PREP (Preparation) (preparation of) 872275-54-2 CA RN Urea,  $\alpha$ -6-quinolyl- $\beta$ -[1,2,3,4-tetrahydro-1-(6-quinolylcarbamyl)-CN 6-quinolyl] - (3CI) (CA INDEX NAME)

=> d ibib abs fhitstr 1-5

L19 ANSWER 1 OF 5 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

142:219284 CA

TITLE:

A preparation of bicyclic imidazole derivatives,

useful for the treatment of viral infections mediated

by Flaviviridae family of viruses

INVENTOR(S):

Schmitz, Franz Ulrich; Roberts, Christopher Don; Griffith, Ronald Conrad; Botyanszki, Janos; Gezginci, Mikail Hakan; Gralapp, Joshua Michael; Shi, Dong Fang;

ADDITION MEAN NO

Liehr, Sebastian J. R.

PATENT ASSIGNEE(S):

Genelabs Technologies, Inc, USA

SOURCE:

PCT Int. Appl., 327 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'		KIND DATE		•			ION I	DATE											
WO	2005				20050210						20040730								
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	•	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,		
		SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,		
		SN,	TD,	TG															
AU	AU 2004261667				A1		2005	0210		AU 2	004-	2616	20040730						
	CA 2534649						2005	0210	1	CA 2	004-	2534		2	040	730			
US	2005	Al		2005	0825	,	US 2	004-	9097		2	040	730						
EP	1651631						EP 2004-779723												
	R:			-			ES,												
		•	SI,	LT,	LV,	FI,	RO,		•	•				•				HR	
	1829												20040730						
.BR	2004	0132	34		Α									20040730					
	2007													20040730					
	2006						2006			MX 2006-PA999							_		
	2006				Α		2007						-	20060222					
	2006				Α		2006	0428											
PRIORIT	Y APP	LN.	INFO	. :								4921							
	•									WO 2	004-	US24'	755	I	W 2	0040	730		
OTHER SO	THER SOURCE(S):					PAT	142:	2192	84										

GI

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The invention relates to a preparation of bicyclic imidazole derivs. of formula I [wherein: W is CH or N; R is H, (cyclo)alkyl, alk(en/yn)yl, or (hetero)aryl, etc.; X is a fused 6,6-bicycle; Y is halogen, CN, NO2, alkyl, or acyl, etc.; Z is C(O)O-(H/alkyl/alk(en/yn)yl), C(O)NH(alkyl), or C(O)NH(aryl), etc.], useful for the treatment of viral infections mediated by Flaviviridae family of viruses. For instance, benzimidazole derivative II (HCV-NS5b enzyme assay, inhibition data: at 100 μM - 98.22%, at 33

 $\mu M$  - 92.74%) was prepared via amidation of III by amino acid IV with a yield of 32% (example 4).

IT 841299-29-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of bicyclic imidazole derivs. for treatment of viral infections mediated by Flaviviridae family of viruses)

RN 841299-29-4 CA

CN 1H-Benzimidazole-5-carboxylic acid, 2-[2,4'-biquinolin]-6-yl-1-cyclohexyl-(CA INDEX NAME)

3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 5 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 139:255356 CA

TITLE: Preventing and/or treating vascular disease,

> cardiomyopathy and/or associated heart failure Cooper, Garth James Smith; Baker, Richard John

PATENT ASSIGNEE(S): Protemix Corporation Limited, N. Z.

PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent English

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	KINI	)	DATE		1	APPL	ICAT:	ION , I	DATE						
WO 2003	 O 2003075910			A1 2003			1	WO 2	003-1		0030	0310			
W:	AE, AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
	CO, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM, HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
	LS, LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜŻ,	NI,	NO,	NZ,	OM,
	PH, PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,
	TZ, UA,	ΰĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw					
RW:	GH, GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
	KG, KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
	FI, FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
	BF, BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
AU 2003	222513		A1		2003	0922	7	0030	310						
PRIORITY APP	]	NZ 2	002-	5177:	22		A 20	0020	308						
	WO 2003-NZ43						W 2	0030	310						
AB A metho	tissue repair in a mamm						nalian patien								

of damaged tissue selected from that of the myocardium, the vascular tree and organs dependent on the vascular tree, said method comprising or including the step of subjected the patient to, and/or administering to the patient, an agent or agents effective in lowering the iron values content of the patient's body sufficient to improve tissue repair.

IT169209-68-1

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for prevention and treatment of cardiovascular diseases)

RN 169209-68-1 CA

5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-CN ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

## ●3 Na

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 5 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 134:252257 CA

TITLE: Preparation of 2-(indolin-3-yl)quinoline derivatives

and compositions in use as antimicrobial agents

INVENTOR(S): Cuny, Gregory D.; Hauske, James R.; Heefner, Donald

L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam;

Melikian-Badalian, Anita; Rossi, Richard F.

PATENT ASSIGNEE(S): Sepracor, Inc., USA

SOURCE: U.S., 112 pp., Cont.-in-part of U.S. Ser. No. 878,781,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE: En FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PAT	PATENT NO.						DATE									
US CA	US 6207679 CA 2293418 US 9857931				B1 200 A1 199			0327 1223	US CA	l 118						
		9857931								1,00	0012	, 02		_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Ŵ:	EE,	ES,	FI,	GB,	GE,	GH,	BM,	BR, BY	J, ID,	IL,	ıs,	JΡ,	KE,	KG,	KP,
		PL,		RO,	RU,	SD,	•	•	LU, L\		•	•	-			
	RW:	GH, FI,	GM, FR,	KE, GB,	LS, GR,	ΜW, IE,	IT,	LU,	UG, ZV MC, NI	J, PT,		•	•	•		
מש	9916								TD, TO		9272	96		1	9980	51 B
Er			BE,						GB, GF							
HU	US 6172084 HU 2000003364						2001		US HU		19980618 19980618					
JP	HU 2000003364 JP 2002505689 AU 757059						2002	0219	JP AU		19980618 19980618					
МО	US 6103905 NO 9906269 US 6376670							0216	NO		19981211 19991217 20000908					
PRIORITY			21		2002	0123	US US US	1997- 1998- 1998- 1998-	87878 45051 99640	31 1 0	1 2 2	B2 1 A 1 A2 1	99700 9980: 99800	519 319 518		
									US	1998- 2000-	21338	35	7	A1 1	9981:	211

OTHER SOURCE(S):

MARPAT 134:252257

GI

$$R^4$$
 $A$ 
 $R^3$ 
 $R^3$ 
 $R^3$ 
 $R^5$ 

Title compds. I [wherein; R, R1, R2 and R3 are H, halo, alk(en)(yn)yl, OH, AΒ alkoxy, amino, nitro, SH, imine, amide, CO, -(CH2)0-8-R80, etc.; R4 is the same as R-R3 but not H; R5 is the same as R4 except that at least 1(-8) CH2 precede R80; A is (un) substituted with any number of R4 up to the number limited by stability and rules of valence; B is substituted with at least one instance of R5 up to the number limited by stability and rules of valence; R80 is (substituted) aryl, cycloalk(en)yl, heterocyclyl or polycyclyl.] and related quinoline derivs. are prepared as antimicrobial agents. For instance, synthesis of II is accomplished by alkylation of 4-hydroxymethyl-6-trifluoromethyl-2-(N-t-butoxycarbonylindol-3yl)quinoline with (4-t-butoxycarbonylaminomethyl)benzyl iodide followed by deprotection. There are 282 examples of I provided. The min. inhibitory concentration (MIC) of I against at least one Gram-pos. bacterium is 0.1-10 μg/mL. Certain compds. of formula I have a therapeutic index in primates of at least 10 for the inhibition of infection by at least one Gram-pos. bacterium.

I

IT 218463-49-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and use of quinolinylindole derivs. as antimicrobial agents) 218463-49-1 CA

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 4 OF 5 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

133:43453 CA

TITLE:

Preparation of 2-(3-indoly1)quinolines as

antibacterial agents

INVENTOR(S):

Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam; Melikian-Badalian, Anita; Rossi, Richard F.; Xie,

Roger L.

PATENT ASSIGNEE(S):

SOURCE:

Sepracor, Inc., USA PCT Int. Appl., 155 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

	PATENT	KIND		DATE			APPL	ICAT	ION I	DATE							
	WO 2000034265				A2 200006			0615	1	 WO 1	 999-	19991203					
					A3		2002				,,,	ODLO			_	,,,,	
	W:	ΑE,	AL,	AM,	AT,	AU,	AZ,	BA,	ВВ,	ВG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	ΚĖ,	KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
		SK,	SL,	ТJ,	TM,	TR,	ŢΤ,	TZ,	UA,	UG,	UΖ,	VN,	YU,	ZA,	zw		
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	ΤZ,	UG,	ŹW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
US 6103905							2000	0815		US 1	998-	2133	19981211				
PRIO	RITY APP	LN.	INFO	. :						US 1	998-	2133	85		A 1	9981	211
										US 1	997-	8787	81		B2 1	9970	619
										US 1	998-	4505	<b>1</b> .		A2 1	9980	319
										US 1	998-	9964	0		A2 1	9980	618
omitte delle de (a)							1 2 2	4345	•								

OTHER SOURCE(S):

MARPAT 133:43453

GI

$$R$$
 $N-(CR_2)_{n-2}$ 
 $R^3$ 
 $R$ 

The title compds. (I) [wherein L and Q = independently a hydrophobic group AΒ or is absent; X = heterocyclyl, (form) amidinyl, guanidinyl, CN, C(S)NR2, N(R)C(S)R, OR, SR, NR2, or PR2; Z = C.tplbond.C, CH:CH, or CH2CH2; R = C.tplbond.Cindependently H, (hetero)alkyl, (hetero)aryl, acyl, sulfonyl, etc.; R1 = H, alkyl, aryl, p-toluenesulfonyl, phthalimidoalkyl, or aminoalkyl; R2 and R3 = independently H, alkyl, or acyl] were prepared by standard synthetic and solid phase combinatorial methods. For example, II was synthesized in a 3-step sequence involving: (1) reduction of 2-[5-bromo-1-(tertbutoxycarbonyl)indol-3-yl]-6-(trifluoromethyl)-4-quinolinecarboxylic acid to the alc. with LiAlH4 (44%), (2) addition of 4-iodo-N-(tertbutoxycarbonyl)benzylamine (preparation given) to the alc. (82%), and (3) indolyl and amine deprotection using TFA (78%). Nearly two-thirds of the 534 indolylquinolines tested in assays against cultures of methicillin-resistant Staphylococcus aureau (MRSA), ciprofloxacinresistant Staphylococcus aureus (CRSA), vancomycin-resistant Enterococcus spp.(VRE), and/or penicillin-resistant Pseudomonas (PRP) had in vitro min. inhibitory concns. (MICs)  $\leq$  10  $\mu M$ . For 12 of the 15 compds. tested in vivo for toxicity, all mice were surviving 7 days after administration of 40 mg/kg doses.

II

IT 218463-49-1P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-(3-indoly1)quinolines as antibacterial agents)

218463-49-1 CA RN

Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-CN yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

Br 
$$O = C - N$$
  $O = C - CH_2 - CH_2 - C - N$   $O = C - O$ 

PAGE 1-B

L19 ANSWER 5 OF 5 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 64:27550 CA ORIGINAL REFERENCE NO.: 64:5090d-e

TITLE: Reactions of a secondary amine in chloroform.

Implications for drug metabolism studies

AUTHOR(S): Leeling, J. L.; Phillips, B. M.; Schut, R. N.;

Fancher, O. E.

CORPORATE SOURCE: Miles Labs., Inc., Elkhart, IN

SOURCE: Journal of Pharmaceutical Sciences (1965), 54(12),

1736-9

CODEN: JPMSAE; ISSN: 0022-3549

DOCUMENT TYPE: Journal LANGUAGE: English

AB Four new compds. were found to form in aged chloroform solns. of 1-(2-quinolyl)piperazine. Three of the compds. were identified, by comparison of thin-layer chromatographic behavior and ir spectra with known compds., as 1-formyl-4-(2-quinolyl)piperazine, 1-chlorocarbonyl-4-(2-quinolyl)piperazine, and 1,1'-oxomethylenebis[4-(2-quinolyl)piperazine]. Three new compds. were found to form in aged ethylene chloride solns. of 1-(2-quinolyl)piperazine, while only one new compound formed in aged methylene chloride solns. The use of chlorinated hydrocarbons for extracting secondary amines from biol. media should be approached with caution, especially when the extract are allowed to stand for 24 hrs. or longer.

IT 4774-25-8P, Piperazine, 1,1'-carbonylbis[4-(2-quinolyl)-

RL: PREP (Preparation) (preparation of)

RN 4774-25-8 CA

CN Piperazine, 1,1'-carbonylbis[4-(2-quinolyl)- (7CI, 8CI) (CA INDEX NAME)

=> s 117 not 119

L20 171 L17 NOT L19

=> s 120 and helica?

68668 HELICA?

L21 12 L20 AND HELICA?

=> d ibib abs fhitstr 1-12

L21 ANSWER 1 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 147:142991 CA

TITLE: Density Functional Theory Calculations and Vibrational

Circular Dichroism of Aromatic Foldamers

AUTHOR(S): Ducasse, Laurent; Castet, Frederic; Fritsch, Alain;

Huc, Ivan; Buffeteau, Thierry

CORPORATE SOURCE: Institut des Sciences Moleculaires, UMR CNRS 5255,

Universite Bordeaux I, Talence, 33405, Fr.

SOURCE: Journal of Physical Chemistry A (2007), 111(23),

5092-5098

CODEN: JPCAFH; ISSN: 1089-5639

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Ab initio calcns. together with vibrational CD (VCD) have been used for AB studying the conformations of a quinoline-derived oligoamide bearing a terminal chiral residue. Three helically folded conformers of the dimer, trimer, and tetramer forms of the oligomer were optimized at the d. functional theory (DFT) level using the B3LYP functional and the 6-31G\* basis set. For each form, the three conformers differ in their helical handedness and in the conformation of the chiral end The calculated structures of the tetramer and also the proportions predicted between them based on their calculated Gibbs free energies differences match remarkably well with exptl. data collected on an octamer. Specifically, a R-phenethyl terminal group gives rise to a 91:9 ratio between left handed and right handed helixes. The predicted VCD spectrum calculated from the Boltzmann population of the individual conformer reproduces very well the exptl. VCD spectrum of the tetramer in CDC13 solution The DFT calcns. performed for the trimer also allow one to assess the preferred handedness of the helix and the conformation of the chiral end group, but the calculated relative populations differ slightly from exptl. data. Finally, this study shows that the dimer fragment is not sufficient to obtain valuable information on the conformation of this aromatic oligoamide foldamer.

IT 905312-25-6

RL: PRP (Properties)

(DFT calcns. and vibrational CD of aromatic foldamers)

RN 905312-25-6 CA

CN 2-Quinolinecarboxamide, 4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-nitro-2quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2quinolinyl]carbonyl]amino]-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

PUBLISHER:

L21 ANSWER 2 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 146:273904 CA

TITLE: Proteomorphous objects from abiotic backbones

AUTHOR(S): Delsuc, Nicolas; Leger, Jean-Michel; Massip, Stephane;

Huc, Ivan

CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac,

33607, Fr.

SOURCE: Angewandte Chemie, International Edition (2007),

46(1+2), 214-217

CODEN: ACIEF5; ISSN: 1433-7851 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 146:273904

AB Big is beautiful: A folded synthetic mol. with a conformation that compares in size with the tertiary folds of a small protein and yet only consist of non-natural units is described. By not controlling the helical handedness allows the effect of tertiary interactions between helical modules through helix-helix side-by-side

induction of handedness to be observed

IT 926293-56-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (NMR and crystal structure on proteomorphous objects from abiotic backbones)

RN 926293-56-3 CA

CN 2-Quinolinecarboxamide, N,N'-[[4-(phenylmethoxy)-2,6pyridinediyl]bis(methylene)]bis[4-(2-methylpropoxy)-8-[[[4-(2methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-nitro-2quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2quinolinyl]carbonyl]amino]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

PAGE 2-B

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 12 CA COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 145:293314 CA Amphipathic helices from aromatic amino acid oligomers TITLE: Gillies, Elizabeth R.; Dolain, Christel; Leger, AUTHOR (S): Jean-Michel; Huc, Ivan CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac, 33607, Fr. Journal of Organic Chemistry (2006), 71(21), 7931-7939 SOURCE: CODEN: JOCEAH; ISSN: 0022-3263 American Chemical Society PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: English CASREACT 145:293314 OTHER SOURCE(S): Synthetic helical foldamers are of significant interest for mimicking the conformations of naturally occurring mols. while at the same time introducing new structures and properties. In particular, oligoamides of aromatic amino acids are attractive targets, as their folding is highly predictable and stable. Here the design and synthesis of new amphipathic helical oligoamides based on quinoline-derived amino acids having either hydrophobic or cationic side chains are described. Their structures were characterized in the solid state by single-crystal X-ray diffraction and in solution by NMR. Results of these studies suggest that an oligomer as short as a pentamer folds into a stable helical conformation in protic solvents, including MeOH and H2O. The introduction of polar proteinogenic side chains to these foldamers, as described here for the first time, promises to provide possibilities for the biol. applications of these mols. In particular, amphipathic helixes are versatile targets to explore due to their importance in a variety of biol. processes, and the unique structure and properties of the quinoline-derived oligoamides may allow new structure-activity relationships to be developed. ΙT 896730-35-1 RL: PRP (Properties) (crystal structure of helical oligoamides based on quinoline-derived amino acids) RN 896730-35-1 CA 2-Quinolinecarboxylic acid, 8-[[[4-(2-methylpropoxy)-8-[[[8-[[[4-(2-methylpropoxy)-8-[[[8-[[[4-(2-methylpropoxy)-8-[[[8-[[4-(2-methylpropoxy)-8-[[[8-[[4-(2-methylpropoxy)-8-[[8-[[4-(2-methylpropoxy)-8-[[8-[[4-(2-methylpropoxy)-8-[[8-[[4-(2-methylpropoxy)-8-[[8-[[4-(2-methylpropoxy)-8-[[8-[4-(2-methylpropoxy)-8-[[8-[4-(2-methylpropoxy)-8-[[8-[4-(2-methylpropoxy)-8-[[8-[4-(2-methylpropoxy)-8-[[8-[4-(2-methylpropoxy)-8-[[8-[4-(2-methylpropoxy)-8-[[8-[4-(2-methylpropoxy)-8-[18-[4-(2-methylpropoxy)-8-[4-( CN methylpropoxy) -8-[[[4-(2-methylpropoxy) -8-[[[8-[[[4-(2-methylpropoxy) -8nitro-2-quinolinyl]carbonyl]amino]-4-[3-[(trifluoroacetyl)amino]propoxy]-2quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2quinolinyl]carbonyl]amino]-4-[3-[(trifluoroacetyl)amino]propoxy]-2quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-4-[3-[(trifluoroacetyl)amino]propoxy]-, methyl ester, compd. with 1-nitrosopropane (1:3) (9CI) (CA INDEX NAME) CM 1

CRN 896730-32-8 CMF C102 H94 F9 N17 O20

$$F_3C-C-NH-(CH_2)_3-O$$
 $OBu-i$ 
 $O-(CH_2)_3-NH-C-CF_3$ 

PAGE 2-A

CM 2

CRN 927-78-6 CMF C3 H7 N O

 $H_3C-CH_2-CH_2-N=0$ 

REFERENCE COUNT:

61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

COPYRIGHT 2007 ACS on STN L21 ANSWER 4 OF 12 CA

ACCESSION NUMBER: 145:210569 CA

TITLE: Vibrational circular dichroism and ab initio structure

elucidation of an aromatic foldamer

AUTHOR (S): Buffeteau, Thierry; Ducasse, Laurent; Poniman, Legiso;

Delsuc, Nicolas; Huc, Ivan

CORPORATE SOURCE: Laboratoire de Physico-Chimie Moleculaire, Universite

Bordeaux I, Talence, 33405, Fr.

Chemical Communications (Cambridge, United Kingdom) SOURCE:

(2006), (25), 2714-2716

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB Ab initio calcns. together with vibrational CD (VCD) are validated as very accurate tools for studying conformations and estimating conformational energies and helical handedness preferences of an entire, large

(112 atoms), abiotic foldamer.

905312-25-6 ·IT

RL: PRP (Properties)

(vibrational CD and ab initio structure elucidation of aromatic foldamer)

RN 905312-25-6 CA

2-Quinolinecarboxamide, 4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-CN[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-nitro-2quinolinyl] carbonyl] amino] -2-quinolinyl] carbonyl] amino] -2-

quinolinyl]carbonyl]amino]-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L21 ANSWER 5 OF 12 CA COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                                               144:87890 CA
                                               Solution structure of quinoline- and pyridine-derived
TITLE:
                                               oligoamide foldamers
AUTHOR (S):
                                               Dolain, Christel; Grelard, Axelle; Laguerre, Michel;
                                               Jiang, Hua; Maurizot, Victor; Huc, Ivan
                                               Institut Europeen de Chimie et Biologie, Pessac,
CORPORATE SOURCE:
                                               33607, Fr.
                                               Chemistry--A European Journal (2005), 11(21),
SOURCE:
                                               6135-6144
                                               CODEN: CEUJED; ISSN: 0947-6539
                                               Wiley-VCH Verlag GmbH & Co. KGaA
PUBLISHER:
DOCUMENT TYPE:
                                               Journal
LANGUAGE:
                                               English
         The unambiguous elucidation of a new folded structure in solution may prove
AB
         to be a very challenging task. The NMR protocols developed for solving
         the solution structures of \alpha\text{-peptides have been applied to aliphatic}
         \beta- and \gamma-peptides but are not directly applicable to aromatic
         oligomers. In particular, the string of spin systems in an aromatic sequence
         cannot be reconstituted solely from correlations between protons. For
         aromatic oligomers, it is shown that the assignment of a large part of the
         13C NMR spectrum through HMBC and HSQC expts. allows to unambiguously
         assign proton NMR spectra and in turn to interpret NOE correlations.
         has been implemented both with quinoline- and pyridine-derived oligoamide
         foldamers, and should be applicable to a wide range of oligomers including
         various combinations of monomers. The NOE correlations allow the
         unambiguous solution structure elucidation of helical conformations
         of oligoamides derived from pyridine and quinoline monomers showing that,
         in these series, the solution structures correspond very well to the
         structures observed in the solid state.
IT
         872471-83-5
         RL: PRP (Properties)
                (solution structure of quinoline- and pyridine-derived oligoamide
               foldamers)
RN
         872471-83-5 CA
         2-Quinolinecarboxylic acid, 4-(1,1-dimethylethoxy)-8-[[[4-(1,1-
CN
         dimethylethoxy) -8-[[[4-(1,1-dimethylethoxy)-8-[[[4-(1,1-dimethylethoxy)-8-
          [[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy)-8-[4-(1,1-dimethylethoxy]-8-[4-(1,1-dimethylethoxy]-8-[4-(1,1-dimethylethoxy]-8-[4-(1,1-dimethylethoxy]-8-[4-(1,1-dimethylethoxy]-8-[4
         dimethylethoxy) -8-[[[4-(1,1-dimethylethoxy)-8-nitro-2-
         quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
         quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
         quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
         quinolinyl]carbonyl]amino]-, methyl ester (CA INDEX NAME)
```

PAGE 2-B

REFERENCE COUNT:

59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 6 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 144:46912 CA

TITLE: Probing helix propensity of monomers within a

helical oligomer

AUTHOR(S): Dolain, Christel; Leger, Jean-Michel; Delsuc, Nicolas;

Gornitzka, Heinz; Huc, Ivan

CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac,

F-33607, Fr.

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2005), 102(45), 16146-16151

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

A simple strategy is proposed to assess the propensity of a given monomer AΒ to follow or not follow a particular helical scheme and to study helix reversal phenomena within helical oligomers. It consists of placing a monomer having a low helix propensity between two conformationally stable helical segments. Helix reversion then occurs preferentially at the site of this monomer, leading to the formation of isomers having P (right-handed) or M (left-handed) helicities at each of the two helical segments. The proportion between the P-P/M-M and P-M isomers is indicative of the stereochem. relations between the inserted monomer and the helical frame. Thus, xylylene or carboxylic acid anhydride spacers have been introduced between two helical oligoamides of 8-amino-2-quinolinecarboxylic acid. Both these spacers presumably lack some of the structural features that confer quinoline units with a high helix propensity. Only one species is observed in solution in the case of an anhydride spacer. This species was shown by x-ray crystallog. to be a racemic mixture of P-P and M-M helixes. Unexpectedly, the anhydride is consistently incorporated within helical oligoamides. For the xylylene spacer, the P-P/M-M racemate and P-M meso compound are in equal proportions in chloroform, showing that this spacer does not have a propensity to adopt any helical conformation in this solvent. However, the equilibrium between the various isomers are shifted in toluene, where one species largely prevails. This species was shown by x-ray crystallog. to be the P-P/M-M racemate. Mol. dynamics simulations are consistent with these solution data. 871328-26-6

RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); BIOL (Biological study); PROC (Process)

(helix inversion and propensity of xylylene and anhydride spacers in the context of quinolinecarboxamide oligomers)

RN 871328-26-6 CA

CN 2-Quinolinecarboxamide, N,N'-[1,3-phenylenebis(methylene)]bis[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-nitro-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-A

ÖBu-i

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 7 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 143:405502 CA

TITLE: Chiral Induction in Quinoline-Derived Oligoamide

Foldamers: Assignment of Helical Handedness

and Role of Steric Effects

AUTHOR(S): Dolain, Christel; Jiang, Hua; Leger, Jean-Michel;

Guionneau, Philippe; Huc, Ivan

CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac,

33607, Fr.

SOURCE: Journal of the American Chemical Society (2005),

127(37), 12943-12951

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:405502

Chiral groups attached to the end of quinoline-derived oligoamide foldamers give rise to chiral helical induction in solution Using various chiral groups, diastereomeric excesses ranging from 9% to 83% could be measured by NMR and CD. Despite these relatively weak values and the fact that diastereomeric helixes coexist and interconvert in solution, the right-handed or left-handed helical sense favored by the terminal chiral group could be determined unambiguously using X-ray crystallog. Assignment of chiral induction was performed in an original way using the strong tendency of racemates to cocrystallize, and taking advantage of slow helix inversion rates, which allowed one to establish that the stereomers observed in the crystals do correspond to the major stereomers in solution The sense of chiral helical induction was rationalized on the basis of sterics. Upon assigning an Rs or Ss chirality to the stereogenic center using a nomenclature where the four substituents are ranked according to decreasing sizes, it is observed that Rs chirality always favors left-handed helicity and Ss chirality favors right-handed helicity (P). X-ray structures shed some light on the role of sterics in the mechanism of chiral induction. The preferred conformation at the stereocenter is apparently one where the bulkiest group should preferentially point away from the helix, the second largest group should be aligned with the helix backbone, and the smallest should point to the helix.

IT 663932-56-7

RL: PRP (Properties)

(chiral induction in quinoline-derived oligoamide foldamers)

RN 663932-56-7 CA

CN 2-Quinolinecarboxamide, 4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8nitro-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-N-[4-(2methylpropoxy)-2-[[[4-(2-methylpropoxy)-2-[[[4-(2-methylpropoxy)-2-[[[(1R)1-phenylethyl]amino]carbonyl]-8-quinolinyl]amino]carbonyl]-8quinolinyl]amino]carbonyl]-8-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-C

REFERENCE COUNT:

68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

PUBLISHER:

L21 ANSWER 8 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 142:463322 CA

TITLE: Molecular apple peels

Garric, Joachim; Leger, Jean-Michel; Huc, Ivan AUTHOR (S): CORPORATE SOURCE:

Institut Europeen de Chimie et Biologie, Pessac,

33607, Fr.

Angewandte Chemie, International Edition (2005), SOURCE:

44(13), 1954-1958

CODEN: ACIEF5; ISSN: 1433-7851 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:463322

Peeling the skin of an apple into a single helical ribbon gives a sort of shell that can be wound back around the apple. Such a shell can be constructed at the mol. scale using a helix with a reduced diameter at both ends which behaves as a capsule and entraps a small guest such as water.

IT 851794-94-0P

> RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystallog.; use of a pyridine-quinoline amide helix with a reduced diameter at both ends as a capsule for encapsulation of water)

RN851794-94-0 CA

2,6-Pyridinedicarboxamide, N,N'-bis[6-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-[4-(2 CN methylpropoxy) -8-nitro-2-quinolinyl] carbonyl] amino] -2quinolinyl]carbonyl]amino]-2-pyridinyl]-4-(phenylmethoxy)-, compd. with methylbenzene (2:3), dihydrate (9CI) (CA INDEX NAME)

CM

CRN 851794-93-9 CMF C80 H73 N15 O15

PAGE 1-A

PAGE 2-B

CM · 2

CRN 108-88-3 CMF C7 H8

REFERENCE COUNT:

53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 9 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 141:260514 CA

TITLE: Design of an Inversion Center between Two

Helical Segments

AUTHOR(S): Maurizot, Victor; Dolain, Christel; Leydet, Yoann;

Leger, Jean-Michel; Guionneau, Philippe; Huc, Ivan

CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac,

33607, Fr.

SOURCE: Journal of the American Chemical Society (2004),

126(32), 10049-10052

CODEN: JACSAT; ISSN: 0002-7863 American Chemical Society

PUBLISHER: American DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:260514

AB A new strategy is proposed to control the relative orientation of two folded helical oligomers in such a way that they diverge from an aromatic linker and have opposite helical handedness. Mutual steric exclusion between the two helixes results from the fact that they cannot be at the same time folded and on the same side of the linker. The concept is validated using the helical conformations of oligoamides of 8-amino-2-quinolinecarboxylic acid, but it should be applicable to many families of oligomers and leads to the first designed meso-helixes.

IT 754216-31-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure; preparation and crystal structure of oligoamides of amino-quinolinecarboxylic acid with an inversion center between two helical segments)

RN 754216-31-4 CA

CN 2-Quinolinecarboxamide, N,N'-(9,10-dihydro-9,10-dioxo-1,5-anthracenediyl)bis[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-nitro-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 10 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 140:218096 CA

TITLE: Switching of Chiral Induction in Helical

Aromatic Oligoamides Using Solid State-Solution State

Equilibrium

AUTHOR(S): Jiang, Hua; Dolain, Christel; Leger, Jean-Michel;

Gornitzka, Heinz; Huc, Ivan

CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac,

33607, Fr.

SOURCE: Journal of the American Chemical Society (2004),

126(4), 1034-1035

CODEN: JACSAT; ISSN: 0002-7863

American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:218096

GI

PUBLISHER:

$$OBu-i$$

$$OBu-i$$

$$N$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N = \begin{pmatrix} N \\ N \\ N \end{pmatrix}$$

$$N =$$

AB The introduction of an R asym. center in an aromatic oligoamide I that adopts stable helical conformations leads to a significant shift of the equilibrium between the right-handed and left-handed helixes in solution: the R-P

and R-M helixes are diastereoisomers. However, these two species were found to cocrystallize in 1:1 proportions. Thus the chiral induction observed in solution is switched off in the solid state. This phenomenon represents an original and unexpected means to control handedness in helical oligomers.

I

IT 663932-56-7P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(preparation and crystal structure of an aminoquinolinecarboxamide-based helical oligomer that displays chiral induction properties in solution)

RN 663932-56-7 CA

CN 2-Quinolinecarboxamide, 4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8[[4-(2-methylpropoxy)-8[[4-(2-methylpropoxy)-8nitro-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-N-[4-(2methylpropoxy)-2-[[[4-(2-methylpropoxy)-2-[[[4-(2-methylpropoxy)-2-[[[(1R)1-phenylethyl]amino]carbonyl]-8-quinolinyl]amino]carbonyl]-8quinolinyl]amino]carbonyl]-8-quinolinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-C

REFERENCE COUNT:

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L21 ANSWER 11 OF 12 CA COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         139:365205 CA
                         Aromatic \delta-peptides: design, synthesis and
TITLE:
                         structural studies of helical,
                         quinoline-derived oligoamide foldamers
                         Jiang, Hua; Leger, Jean-Michel; Dolain, Christel;
AUTHOR (S):
                         Guionneau, Philippe; Huc, Ivan
                         Institut Europeen de Chimie et Biologie, Pessac,
CORPORATE SOURCE:
                         33607, Fr.
                         Tetrahedron (2003), 59(42), 8365-8374
SOURCE:
                         CODEN: TETRAB; ISSN: 0040-4020
                         Elsevier Science B.V.
PUBLISHER:
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
                         CASREACT 139:365205
OTHER SOURCE(S):
    Oligoamides of 8-amino-4-isobutoxy-2-quinolinecarboxylic acid were
     designed and synthesized, and their helical structures were
     characterized in the solid state by single crystal X-ray diffraction, and
     in solution by 1H NMR. The monomer Me 4-isobutoxy-8-nitro-2-
     quinolinecarboxylate is easily prepared in three steps from 2-nitroaniline
     and di-Me acetylene dicarboxylate. Successive hydrogenations of nitro
     groups, saponifications of esters and couplings of amines and acids via
     the acid chlorides gave a dimer, tetramer, hexamer, octamer, and decamer
     in a convergent fashion. The oligomers were shown to adopt a bent
     conformation stabilized by intramol. hydrogen bonds between amide
     hydrogens and adjacent quinoline nitrogens. In the solid, the dimer
     adopts a planar crescent shape and the octamer a helical
     conformation. All NMR data are consistent with similar conformations in
     solution The helixes are apparently remarkably stable. Some of them remain
     helical even at 120°C in deuterated DMSO. The structural
     studies confirm the predictions made by computer and demonstrate the high
     potency of the design principles.
IT
     517883-18-0P
     RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); RACT (Reactant or reagent)
        (crystal structure of; preparation of aromatic peptides and their
       helical structures in solid state by x-ray, and in solution by
       NMR)
     517883-18-0 CA
RN
     2-Quinolinecarboxylic acid, 4-(2-methylpropoxy)-8-[[4-(2-methylpropoxy)-8-
CN
     [[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-
     [[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-
     nitro-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
     quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
     quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-
     quinolinyl]carbonyl]amino]-, methyl ester (CA INDEX NAME)
```

PAGE 2-B

REFERENCE COUNT:

THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 12 OF 12 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 138:338484 CA
TITLE: Aromatic δ-Peptides

AUTHOR(S): Jiang, Hua; Leger, Jean-Michel; Huc, Ivan

CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac,

33607, Fr.

SOURCE: Journal of the American Chemical Society (2003),

125(12), 3448-3449

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:338484

GΙ

AB Oligoamides I (n = 1, 3, 7) of 8-amino-2-carboxy-quinoline were prepared and their stable helical conformations were characterized in solution by 1H NMR and in the solid state by single-crystal x-ray diffraction. The helix comprised only 2.5 units per turn, which represented the highest curvature achieved by aromatic oligoamides until now. 2-Nitroaniline and dimethylacetylene dicarboxylate were starting materials, and the synthesis strategy involved thermal closure of the pyridine ring, formation of alkyl-aryl ether using isobutanol under Mitsunobu conditions, and a segment doubling strategy with selective deprotections and couplings via acid chlorides to give dimer, tetramer and octamer of I.

Ι

517883-17-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and helical conformation of aminoquinolinecarboxylate-based aromatic peptides)

RN 517883-17-9 CA

CN 2-Quinolinecarboxylic acid, 4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-[[[4-(2-methylpropoxy)-8-nitro-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-2-quinolinyl]carbonyl]amino]-, methyl ester (CA INDEX NAME)

REFERENCE COUNT:

18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 120 not 121 L22 159 L20 NOT L21

=> s 122 and py<2003 21878643 PY<2003 L23 128 L22 AND PY<2003

=> d ibib abs fhitstr 1-50

CA COPYRIGHT 2007 ACS on STN L23 ANSWER 1 OF 128

ACCESSION NUMBER:

CORPORATE SOURCE:

140:218058 CA

TITLE:

Solid supported parallel synthesis of dimer libraries Subra, Gilles; Amblard, Muriel; Durand, Philippe;

AUTHOR (S):

Komesli, Sylvianne; Renaut, Patrice; Martinez, Jean Laboratoire des Aminoacides, Peptides et Proteines, Faculte de Pharmacie, UMR 5810, Montpellier, 34060,

SOURCE:

Peptides 2000, Proceedings of the European Peptide Symposium, 26th, Montpellier, France, Sept. 10-15,

2000 (2001), Meeting Date 2000, 973-974.

Editor(s): Martinez, Jean; Fehrentz, Jean-Alain.

Editions EDK: Paris, Fr.

CODEN: 69EDWK; ISBN: 2-84254-048-4

DOCUMENT TYPE:

Conference

LANGUAGE:

English

AΒ A symposium report. Dimer libraries, particularly the JMV 1783 dimer library, were synthesized using lysine as a central template via the Multipin technol. The core of the compds. in the dimer library synthesis is a diamino acid template which is linked to the Synphase crown by a Rink amide type linker. Eleven libraries generated a family of 650 members, of which 10 showed a growth hormone binding inhibition of > 80% at 10-5 M.

664335-91-5P, JMV 1946 IT

RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)

(solid supported parallel synthesis of peptide dimer libraries and their growth factor hormone agonist activity)

664335-91-5 CA RN

6-Quinolinecarboxamide, N,N',N'',N'''-[[(2-amino-2-oxoethyl)imino]bis[3,1-CN propanediylimino(2-oxo-2,1-ethanediyl)nitrilobis[3,1-propanediylimino[(1S)-2-oxo-1-(phenylmethyl)-2,1-ethanediyl]]]]tetrakis- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

138:32394 CA

TITLE:

Synthesis and characterization of new porphyrin

reagents

AUTHOR (S):

Yu, De-zhong; Guo, Xiu-hong

CORPORATE SOURCE:

Department of Pharmacy, Wuhan Institute of Chemical

Technology, Wuhan, 430073, Peop. Rep. China Wuhan Huagong Xueyuan Xuebao (2002), 24(2),

SOURCE:

13-15

CODEN: WXUXEY; ISSN: 1004-4736

PUBLISHER:

Wuhan Huagong Xueyuan Xuebao Bianjibu

DOCUMENT TYPE:

Journal

LANGUAGE:

Chinese

A method for the synthesis of quinolinyl-porphyrins has been presented. AB The quinolinyl-porphyrins were prepared by cyclocondensation of quinolinylcarboxyaldehyde with pyrrole in EtCO2H containing Ac2O followed by removing byproducts using chromatog. The products were characterized by IR and element anal. 'The  $K\alpha 1$  and  $K\alpha 2$  of the reagents have been determined by spectrophotometry. The reagents give high yield and good selectivity for anal. of zinc and copper ore.

IT 477841-45-5P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(synthesis and characterization of new porphyrin reagents)

477841-45-5 CA RN

Methanone, 21H, 23H-porphine-5, 10, 15, 20-tetrayltetrakis [8-quinolinyl- (9CI) CN(CA INDEX NAME)

CA COPYRIGHT 2007 ACS on STN L23 ANSWER 3 OF 128

ACCESSION NUMBER:

137:362954 CA

TITLE:

Comparative studies on the iron chelators O-TRENSOX and TRENCAMS: selectivity of the complexation towards

other biologically relevant metal ions and Al3+

AUTHOR (S):

Biaso, Frederic; Baret, Paul; Pierre, Jean-Louis;

Serratrice, Guy

CORPORATE SOURCE:

Laboratoire d'Etudes Dynamiques et Structurales de la.

Selectivite, Chimie Biomimetique, Universite Joseph

Fourier, UMR CNRS 5616, Grenoble, F-38041, Fr.

SOURCE: Journal of Inorganic Biochemistry (2002),

89(1-2), 123-130 CODEN: JIBIDJ; ISSN: 0162-0134

PUBLISHER:

DOCUMENT TYPE:

Elsevier Science Inc.

Journal

LANGUAGE:

English

Complexation consts. have been determined by potentiometric titration and AB spectrophotometric measurements for several biol. relevant divalent metals (Ca2+, Cu2+, Zn2+) as well as Al3+ with the sulfonated tris(8-hydroxyquinolinate) tripodal ligand O-TRENSOX. The values demonstrate great selectivity of O-TRENSOX for Fe3+ according to the sequence Fe3+ >>Cu2+>Zn2+>Ca2+. This selectivity is compared to that shown by tris(hydroxamate) and tris(catecholate) ligands. 1H NMR spectroscopy of the diamagnetic complexes have been carried out in 2H2O solns.

IT 169209-68-1, O-TRENSOX

> RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(comparative studies on the iron chelators O-TRENSOX and TRENCAMS and selectivity of the complexation toward other biol. relevant metal ions and Al3+)

RN 169209-68-1 CA

CN 5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

●3 Na

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS 16 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L23 ANSWER 4 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 137:319953 CA

TITLE: Synthesis, biological activity and molecular modeling

studies of 1,2,3,4-tetrahydroisoquinoline derivatives as conformationally constrained analogues of KN62, a potent antagonist of the P2X7-receptor containing a

tyrosine moiety

AUTHOR(S): Baraldi, Pier Giovanni; Makaeva, Rimma; Pavani, Maria

Giovanna; Del Carmen Nunez, Maria; Spalluto, Giampiero; Moro, Stefano; Falzoni, Simonetta; Di

Virgilio, Francesco; Romagnoli, Romeo

CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di

Ferrara, Ferrara, Italy

SOURCE: Arzneimittel-Forschung (2002), 52(4),

273-285

CODEN: ARZNAD; ISSN: 0004-4172

PUBLISHER: Editio Cantor Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:319953

AB A new series of ring constrained analogs of the P2X7 receptor antagonist KN62 (1-[N,O-bis(1,5-isoquinolinesulfonyl)-N-methyl-L-tyrosyl]-4-phenylpiperazine) containing the 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid core with S configuration in position 3 was synthesized and their antagonist activities were tested on human macrophage cells. While KN62 is a potent antagonist of the P2X7 receptor, these novel compds. are weak antagonists of the purinergic P2X7 receptor and only one compound showed appreciable activity as P2X7 antagonist, which was 30 times weaker than that reported for KN62. Along with this compound, several other derivs. were the most active inhibitors in this synthesized series. A mol. modeling study confirmed that an extended rather than folded conformation seems to be crucial for the antagonistic activity at the P2X7 receptor.

IT 271248-06-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis and biol. activity and mol. modeling studies of tetrahydroisoquinoline derivs. as conformationally constrained analogs of potent antagonist of P2X7-receptor KN62)

RN 271248-06-7 CA

CN 5-Quinolinesulfonic acid, (3S)-1,2,3,4-tetrahydro-3-[(4-phenyl-1-piperazinyl)carbonyl]-2-(5-quinolinylsulfonyl)-7-isoquinolinyl ester (CAINDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

137:257677 CA

TITLE:

Methods of treating or preventing Alzheimer's disease

using 4-aryl-3-aralkoxypiperidines and

-azabicyclooctanes

INVENTOR(S):

Nieman, James A.; Fang, Lawrence; Jagodzinska, Barbara Elan Pharmaceuticals, Inc., USA; Pharmacia & Upjohn

SOURCE:

PCT Int. Appl., 449 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	CENT :	NO.			KIN	0	DATÉ		i	APPL	ICAT:	ION 1	NO.		D	ATE	
	2002				A2		2002		Ī	WO 2	002-1	JS91	00		20	0020	321 <
WO	2002	0764	40		A3		2002	1128									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	ВA,	BB,	BG,	BR,	ΒY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚŻ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	ŪĠ,	US,	UΖ,	VN,	YU,	ZA,	ZM,	ZW							
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG
AU	2002	3068	48		Al		2002	1008	1	AU 2	002-3	3068	48		20	0020	321 <
US	2006	0795	33		A1		2006	0413	1	US 2	004-4	4728	58		20	0040	202
PRIORITY	APP	LN.	INFO	. :					1	US 2	001-3	2783	71P	1	P 20	0010	323
									1	US 2	001-	3087	29P		P 20	0010	730
									I	WO 2	002-1	JS91	00	1	W 20	0020	321

OTHER SOURCE(S):

MARPAT 137:257677

GI

$$R^{4}$$
 $XZ_{n}R^{1}$ 
 $XZ_{n}R^{1}$ 

Disclosed are methods for treating or preventing Alzheimer's disease, and AB other diseases, and/or inhibiting  $\beta$ -secretase enzyme, and/or inhibiting deposition of A beta peptide in a mammal, using 3,4-disubstituted piperidinyl compds. (I) wherein the variables R1, R2, R3, R4, Q, W, X, Z, m, and n are defined below. Although neither the compds. nor the methods of preparation are claimed, .apprx.150 example prepns., translations from the German examples of patent WO 9709311, are included. I inhibit  $\beta$ -secretase with IC50 < 50  $\mu M$ ; compds. that are effective inhibitors of  $\beta$ -secretase activity demonstrate reduced cleavage of the substrate as compared to a control. In I, R1 is aryl, heterocycle; R2 is Ph, naphthyl, acenaphthyl, cyclohexyl, pyridyl, pyrimidinyl, pyrazinyl, oxopyridinyl, diazinyl, triazolyl, thienyl, oxazolyl, oxadiazolyl, thiazolyl, pyrrolyl, or furyl, optionally

IT

RN

CN

substituted. R3 is: H, hydroxy, lower-alkoxy, or lower-alkenyloxy; R4 is: H, lower-alkyl, lower-alkenyl, lower-alkoxy, hydroxy-lower-alkyl, lower-alkoxy-lower-alkyl, benzyl, oxo, or where R3 and R4 together are a bond, or as specified in the claims. Q is: ethylene, or is absent; X is: a bond, -O-, -S-, -CH-R11- (R11 defined in claims), -CHOR9- (R9 defined in claims), -OCO, -CO-, or C:NOR10- (R10 is carboxyalkyl, alkoxycarbonylalkyl, alkyl or H), with the bond emanating from an O or S atom joining to a saturated C atom of group Z or to R1; W is: -O-, or -S-; Z is: lower-alkylene, lower-alkenylene, hydroxy-lower-alkylidene, -O-, -S-, -O-Alk- (Alk is a lower alkylene), -S-Alk-, -Alk-O-, or -Alk-S. N is: 1, or 0 or 1 when X is -O-CO; and where m is 0 or 1; with provisos. 188874-62-6P, 1-Piperidinecarboxylic acid, 4-[4-[3-(phenylmethoxy)propoxy]phenyl]-3,5-bis(7-quinolinylmethoxy)-, 1,1-dimethylethyl ester,  $(3\alpha, 4\beta, 5\alpha)$ -RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (methods of treating or preventing Alzheimer's and other diseases using 4-aryl-3-aralkoxypiperidines and -azabicyclooctanes) 188874-62-6 CA 1-Piperidinecarboxylic acid, 4-[4-[3-(phenylmethoxy)propoxy]phenyl]-3,5bis(7-quinolinylmethoxy)-, 1,1-dimethylethyl ester,  $(3\alpha, 4\beta, 5\alpha)$  - (9CI) (CA INDEX NAME)

Relative stereochemistry.

L23 ANSWER 6 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 137:253847 CA

A new molecular switch: redox-driven translocation TITLE:

mechanism of the copper cation

AUTHOR(S): Kalny, Daniel; Elhabiri, Mourad; Moav, Tamar;

Vaskevich, Alexander; Rubinstein, Israel; Shanzer,

Abraham; Albrecht-Gary, Anne-Marie

Laboratoire de Physico-Chimie Bioinorganique, Faculte CORPORATE SOURCE:

de Chimie, UMR 7509 CNRS, Universite Louis Pasteur,

Strasbourg, 67000, Fr.

SOURCE: Chemical Communications (Cambridge, United Kingdom) (

2002), (13), 1426-1427

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

English LANGUAGE:

We report the synthesis of a novel mol. switch based on a double-stranded AB ditopic ligand which operates through the CuII/CuI couple; the mononuclear cuprous and cupric complexes were characterized by absorption spectrophotometry; reversible motion of the copper ion between the two binding sites is driven by an auxiliary oxidation and reduction reaction; the rate-limiting steps of this translocation process were determined as well as the corresponding kinetic parameters.

IT 460711-16-4P

RL: CPS (Chemical process); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); RACT (Reactant or reagent) (mol. switch and redox-driven translocation mechanism of the copper

cation)

RN 460711-16-4 CA

Copper (1+), [N5, N5''-[1,2-dithiolan-4-ylidenebis (methylene)] bis [N'-[(8-CN hydroxy-2-quinolinyl)methyl][2,2'-bipyridine]-5,5'-dicarboxamidekN1, kN1']]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

CORPORATE SOURCE:

137:53035 CA

TITLE:

Hydrophilic and lipophilic iron chelators with the

same complexing abilities

AUTHOR(S):

Imbert, Daniel; Baret, Paul; Gaude, Didier;

Gautier-Luneau, Isabelle; Gellon, Gisele; Thomas,

Fabrice; Serratrice, Guy; Pierre, Jean-Louis

Laboratoire de Chimie Biomimetique, LEDSS UMR CNRS

5616, Universite Joseph Fourier, Grenoble, 38041, Fr.

SOURCE: Chemistry -- A European Journal (2002), 8(5),

1091-1100

CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER:

Wiley-VCH Verlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AR A new series of iron chelators with the same coordination sphere as the water-soluble ligand O-trensox, but featuring a variable hydrophiliclipophilic balance, have been obtained by grafting oxyethylene chains of variable length on a C-pivot tripodal scaffold. The X-ray structure of a ferric complex exhibiting tris(8-hydroxyquinolinate) coordination and solution thermodn. properties (pKa of the ligands, stability consts. of the ferric complexes) have been determined The complexing ability (pFeIII values) of the ligands are similar to that of O-trensox. Partition coeffs. between water and octanol or chloroform have been measured and transport across a membrane has been mimicked ("shuttle process"). The results of biol. assays (iron chelation with free ligands or iron nutrition with ferric complexes) could not be correlated with the partition coeffs. These results call into question the role of distribution coeffs. (of the ligands and/or complexes) in the biol. activities of iron chelators.

438527-46-9P IT

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(iron complexation with O-trensox analogs bearing polyoxyethylenic chains)

RN 438527-46-9 CA

CN

7-Quinolinecarboxamide, N,N'-[4-[3-[[(8-hydroxy-7quinolinyl)carbonyl]amino]propyl]-4-(3,6,9,12-tetraoxatridec-1-yloxy)-1,7heptanediyl]bis[8-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- o-  ${\rm CH_2} {\rm CH_2}-$  ome

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 8 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

136:325436 CA

TITLE:

Preparation of quinolinylindoles as antimicrobial

agents

INVENTOR(S):

Cuny, Gregory D.; Hauske, James R.; Hoemann, Michael

Z.; Chopra, Ian

PATENT ASSIGNEE(S):

Sepracor Inc., USA

SOURCE:

U.S., 167 pp., Cont. of U.S. Ser. No. 639,622.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6376670	B1	20020423	US 2000-658690	20000908 <
US 6207679	B1	20010327	US 1998-45051	19980319 <
US 6172084	B1	20010109	US 1998-99640	19980618 <
US 6103905	A	20000815	US 1998-213385	19981211 <
PRIORITY APPLN. INF	·O.:		US 1997-878781 B2	19970619
			US 1998-45051 A2	19980319
			US 1998-99640 A2	19980618
			US 1998-213385 A1	19981211
			US 2000-639622 A2	20000815
OMITTED COLLEGE (C)	MADDAM	126.225426		

OTHER SOURCE(S):

MARPAT 136:325436

GI

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- AB The title compds. [I; Z = CO, CR2; R = H, alkyl; R5-R8, R14-R17 = H, halo, alkyl, etc.; R9, R10 = H, alkyl, cycloalkyl, etc.; R3 = H, alkyl; R11 = H, alkyl; R12 = H, alkyl] which are bactericidal to a Gram-pos. bacterium via a non-lytic mechanism at its MIC (data given), were prepared E.g., a multi-step synthesis of II, was given.
- IT 218463-49-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinolinylindole derivs. as antimicrobial agents)

- RN 218463-49-1 CA
- CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 9 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 136:310127 CA

TITLE: Potent P2X7 receptor antagonists: tyrosyl derivatives

synthesized using a sequential parallel synthetic

approach

AUTHOR(S): Ravi, R. Gnana; Kertesy, Sylvia B.; Dubyak, George R.;

Jacobson, Kenneth A.

CORPORATE SOURCE: Molecular Recognition Section, Laboratory of

Bioorganic Chemistry, National Institute of Diabetes, Digestive and Kidney Diseases, National Institutes of

Health, Bethesda, MD, 20892-0810, USA Drug Development Research (2001), 54(2),

75-87

CODEN: DDREDK; ISSN: 0272-4391

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE:

Journal English

LANGUAGE:
OTHER SOURCE(S):

CASREACT 136:310127

GΙ

SOURCE:

### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Novel analogs of 1-(N,O-bis[5-isoquinolinesulfonyl]-N-methyl-L-tyrosyl)-4-AB phenylpiperazine (KN-62, 1) were synthesized and found to be potent antagonists in a functional assay, inhibition of ATP-induced K+ efflux in HEK293 cells expressing recombinant human P2X7 receptors. Antagonism of murine P2X7 receptors was also observed The analogs consisted of L-tyrosine derivs., of the general structure R1-Tyr(OR2)-piperazinyl-R3, in which three positions were systematically varied in structure through facile acylation reactions. Each of the three positions was optimized in sequence through parallel synthesis alternating with biol. evaluation, leading to the identification and optimization of potent P2X7 antagonists. The optimal groups at R1 were found to be large hydrophobic groups, linked to the  $\alpha$ -amino position through carbamate, amide, or sulfonamide groups. The benzyloxycarbonyl (Cbz) group was preferred over most sulfonamides and other acyl groups examined, except for quinoline sulfonyl. At R2, an aryl-sulfonate ester was preferred, and the order of potency was p-tolyl, p-methoxyphenyl, Ph >  $\alpha$ -naphthyl,  $\beta$ -naphthyl. A benzoyl ester was of intermediate potency. Aliphatic esters and carbonate derivs. at the tyrosyl phenol were inactive, while a tyrosyl O-benzyl ether was relatively potent. The most potent P2X7 receptor antagonists identified in this study contained Cbz at the R1 position, an aryl sulfonate at the R2 position, and various acyl groups at the R3 position. At R3, t-butyloxycarbonyl- and benzoyl groups were preferred. The opening of the piperazinyl ring to an ethylene diamine moiety abolished antagonism. In concentration-response studies, a di-isoquinolinyl, Boc derivative,

(I) (MRS2306), displayed an IC50 value of 40 nM as an antagonist of P2X7 receptor-mediated ion flux and was more potent than the reference compound 1. N $\alpha$ -Cbz, Boc-piperazinyl derivs., (II) (MRS2317), (III) (MRS2326), and (IV) (MRS2409) were less potent than 1, with IC50 values of 200-300 nM.

IT 410522-80-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(potent P2X7 receptor antagonists tyrosyl derivs. synthesized using a

sequential parallel synthetic approach)

RN 410522-80-4 CA

CN 1-Piperazinecarboxylic acid, 4-[(2S)-1-oxo-2-[(8-quinolinylsulfonyl)amino]-3-[4-[(8-quinolinylsulfonyl)oxy]phenyl]propyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 10 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

136:177906 CA

TITLE:

New 8-hydroxyquinoline and catecholate iron chelators:

influence of their partition coefficient on their

biological activity

AUTHOR (S):

Henry, Christophe; Rakba, Nafissa; Imbert, Daniel; Thomas, Fabrice; Baret, Paul; Serratrice, Guy; Gaude,

Didier; Pierre, Jean-Louis; Ward, Roberta J.;

Crichton, Robert R.; Lescoat, Gerard

CORPORATE SOURCE:

Unite de Biochimie, Universite catholique de Louvain,

Louvain-La-Neuve, 1348, Belg.

SOURCE:

Biochemical Pharmacology (2001), 62(10),

1355-1362

CODEN: BCPCA6; ISSN: 0006-2952

Elsevier Science Inc.

DOCUMENT TYPE:

Journal English

PUBLISHER: LANGUAGE:

Four new hexadendate chelators, three hydroxyquinoline-based, Csox, AB O-Trensox, Cox750, and one catecholate-based CacCam-which have comparable skeletal structures and pFe, but widely different partition coeffs., (Kpart), 0.01, 0.02, 1 and 3.2 resp., have been tested for their iron chelating efficacy in vitro by two methods. First, by their ability to remove iron from ferritin in solution or second, to remove iron from iron-loaded hepatocytes in vitro. Our objective was to ascertain the importance of Kpart and pFe, on the biol. efficiency of the mol. Previous studies proposed that an ideal value of Kpart of 1 should give maximum biol. activity. Mobilization of iron by Csox and CacCAM from ferritin was similar and furthermore more efficient than desferrioxamine B. In the iron-loaded hepatocyte cultures, the three hydroxyquinoline chelators, although showing diversity in terms of lipophilicity, appeared to be very similar in their capacity to chelate iron. CacCAM, the unique catecholate, was the most efficient of the mols. tested, as well as being the least toxic in the cellular model despite having the lowest value of In conclusion, the use of the partition coefficient and pFe, as tools for predicting biol. activity of iron chelators should be not generalized. Further studies are required to understand the influence of the structure on the biol. activity of the mol.

169209-68-1 IT

> RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)

(influence of partition coefficient on 8-hydroxyquinoline and catecholate iron chelator activity)

RN 169209-68-1 CA

5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-CN ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

OH OH OH CH2 SO3H

OH OH CH2 SO3H

$$CH_2$$
 SO3H

 $CH_2$  SO3H

 $CH_2$  SO3H

 $CH_2$  SO3H

●3 Na

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 11 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 136:128230 CA

TITLE: From 8-hydroxy-5-sulfoquinoline to new related

fluorogenic ligands for complexation of aluminum(III)

and gallium(III)

AUTHOR(S): Launay, Franck; Alain, Valerie; Destandau, Emilie;

Ramos, Nathalie; Bardez, Elisabeth; Baret, Paul;

Pierre, Jean-Louis

CORPORATE SOURCE: Laboratoire de Photophysique et Photochimie

Supramoleculaires et Macromoleculaires, (CNRS UMR 8531), Ecole Normale Superieure de Cachan, Cachan,

94235, Fr.

SOURCE: New Journal of Chemistry (2001), 25(10),

1269-1280

CODEN: NJCHE5; ISSN: 1144-0546

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

The hexadentate tripodal ligand O-TRENSOX (already known as a AB siderophore), incorporating three 8-hydroxy-5-sulfoquinoline (8-HQS) subunits, was studied as a potential fluorogenic ligand of Al(III) and Ga(III). For the sake of comparison, every chelation study was also carried out with n-BUSOX, a ligand similar to one arm of O-TRENSOX. Chelations were studied at the optimal pH for fluorescence emission: pH = 4 for Al(III) and pH = 2 for Ga(III). An outstanding 'tripod' effect is exhibited by the values of the stability consts.: with O-TRENSOX, log  $\beta$ 111 = 24.8 for Al(III) and 33.7 for Ga(III), whereas with n-BUSOX, log  $\beta$ 110 = 8.6 for Al(III) and 11.6 for Ga(III) at 25°. O-TRENSOX is nearly as efficient for Ga(III) chelation as for Fe(III). When increasing the [metal]/[ligand] ratio, fluorescence emission rose until either 1 : 1 chelation with n-BUSOX or 3 : 1 chelation with O-TRENSOX was achieved. Then, the resulting fluorescence intensity leveled off. The fluorescence emission intensity from n-BUSOX chelates is 10-fold larger than that from O-TRENSOX chelates, suggesting that a self-quenching process occurs within the latter complexes. In terms of selectivity, ions such as Zn(II) or Cd(II), known to form strongly fluorescent complexes with 8-HQS, are not chelated at pH = 2 by n-BUSOX and O-TRENSOX. Thus, they are not potential interferences for Ga(III) determination, whereas Fe(III) strongly interferes, quenching the fluorescence. Conversely, although less stable at pH = 4, the chelates of Zn(II) and Cd(II) are possible interferences for Al(III) determination because of their strong fluorescence emission.

IT 390426-83-2

RL: PRP (Properties)

(fluorescence spectra and stability constant of)

RN 390426-83-2 CA

CN Aluminate(5-), bis[[7-[[[2-[bis[2-[[(8-hydroxy-5-sulfo-7-quinolinyl)carbonyl]amino]ethyl]amino]ethyl]amino]carbonyl-κ0]-8-(hydroxy-κ0)-5-quinolinesulfonato(4-)]-, hexahydrogen, (T-4)- (9CI) (CA INDEX NAME)

PAGE 2-B

OH

$$CH_2$$
 $SO_3$ 
 $CH_2$ 
 $CH_$ 

REFERENCE COUNT:

51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 12 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

135:325312 CA

TITLE:

Optical recording material containing diazaporphyrin

compound

INVENTOR(S):

Nishimoto, Taizo; Ogiso, Akira; Tsukahara, Hiroshi;

Inoue, Shinobu; Misawa, Tsutayoshi; Koike, Shoji

Mitsui Chemicals Inc., Japan; Yamamoto Chemicals Inc.

SOURCE:

Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

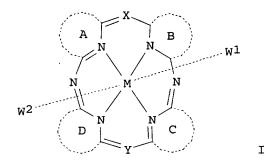
Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001287460 PRIORITY APPLN. INFO.:	A	20011016	JP 2000-106501 JP 2000-106501	20000407 < 20000407
OTHER SOURCE(S):	MARPAT	135:325312		

GI



AB The material has a recording layer of organic dyes containing diazaporphyrin compound I (A, B, C = (substituted) pyrrole ring; X, Y = (substituted) methine; M = divalent metal, W1-2 = N-containing aromatic ring. which may have substituent coordinated to M). The WORM-type recording material recorded and read at wavelength 300-500 and/or 500-700 nm is obtained.

IT 367459-68-5

RL: DEV (Device component use); USES (Uses) (optical recording material containing diazaporphyrin compound)

RN 367459-68-5 CA

CN Iron,  $[10,20-difluoro-N,N',N'',N'''-tetramethyl-21H,23H-5,15-diazaporphine-3,7,13,17-tetracarboxamidato(2-)-<math>\kappa$ N21, $\kappa$ N22, $\kappa$ N23, $\kappa$ N 24]bis(quinoline)-, (OC-6-12)- (9CI) (CA INDEX NAME)

L23 ANSWER 13 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

135:204345 CA

TITLE:

New chiral receptors based on dibenzotetraaza[14]annulenes

AUTHOR(S):

Eilmes, J.; Michalski, O.; Wozniak, K.

CORPORATE SOURCE:

Faculty of Chemistry, Jagiellonian University, Krakow,

30-060, Pol.

SOURCE:

Inorganica Chimica Acta (2001), 317(1,2),

103-113

CODEN: ICHAA3; ISSN: 0020-1693

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 135:204345

Elsevier Science S.A.

Reactions of dibenzotetraaza[14]annulene Ni(II) complexes 1 and 2 with oxalyl chloride and chiral terpene alcs. ((-)menthol, (-)borneol), and the Cinchona alkaloid (quinine) afforded new mono and disubstituted derivs. bearing corresponding ester groups at the meso positions. The demetalation of di(-)menthyloxycarbonyl and di(-) bornyloxycarbonyl derivs. was accomplished by gaseous HCl, leading to corresponding free bases. Single-crystal x-ray diffraction of the free ligand equipped with two (-)menthyloxycarbonyl substituents revealed a saddle-like shape of the mol. resulting in the nonequivalence of two axial coordination sites of the macrocycle. The (-) menthyloxycarbonyl substituents define the 'walls' of a cavity on one side of the macrocyclic platform. The two menthyl rings belonging to the meso substituents appeared to be nonequivalently arranged on both propanediiminate parts of the macrocycle, relative to their Ph and Me substituents. The mols. of the ligand are arranged in stacking columns and form cavities in the crystal lattice. The mols. of solvent (benzene) reside in these cavities. The amine protons of the central tetraaza fragment of the macrocycle are involved in two asym. intramol. N-H···N H bonds. The 1H and 13C NMR spectra measured at room temperature, in CDC13 solution, provided evidence of

conformational nonequivalence within both meso-disubstituted propanediiminate fragments of the macrocycle. Addnl., two nonequiv. NH protons were detected in the 1H NMR spectra of both free ligands. The new products were characterized by elemental analyses, ESI MS, IR, 1H and 13C NMR data.

IT 357168-06-0P

RN 357168-06-0 CA

CN Nickel, [bis[(8α,9R)-6'-methoxycinchonan-9-yl] 7,16-dihydro-6,8,15,17-tetramethyldibenzo[b,i][1,4,8,11]tetraazacyclotetradecine-7,16dicarboxylato(2-)-κN5,κN9,κN14,κN18]-, (SP-4-1)-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

SOURCE:

L23 ANSWER 14 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 135:76769 CA

TITLE: Antiplasmodial Activity and Cytotoxicity of Bis-,

Tris-, and Tetraquinolines with Linear or Cyclic Amino

Linkers

AUTHOR(S): Girault, Sophie; Grellier, Philippe; Berecibar, Amaya;

Maes, Louis; Lemiere, Pascal; Mouray, Elisabeth; Davioud-Charvet, Elisabeth; Sergheraert, Christian Institut de Biologie et Institut Pasteur de Lille,

Universite de Lille II, Lille, 59021, Fr.

Journal of Medicinal Chemistry (2001),

44(11), 1658-1665

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:76769

AB Bisquinoline heteroalkanediamines were structurally modified in order to study the effects of enhanced bulkiness and rigidity on both their activity on strains of Plasmodium falciparum expressing different degrees of chloroquine (CQ) resistance and their cytotoxicity toward mammalian cells. While cyclization yielded mols. of greater rigidity that were not more active than their linear counterparts, they were characterized by an absence of cytotoxicity. Alternatively, dimerization of these compds. led to tetraquinolines that are very potent for CQ-resistant strains and noncytotoxic.

IT 347895-61-8P

CORPORATE SOURCE:

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation and antiplasmodial activity and cytotoxicity of bis-, tris-,

and tetraquinolines with linear or cyclic amino linkers)

RN 347895-61-8 CA

CN 1H-1,4,7-Triazonine-1-butanoic acid, 4,7-bis(7-chloro-4quinolinyl)octahydro-γ-oxo- (CA INDEX NAME)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 15 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

134:337553 CA

TITLE:

Application of 3-quinolinoyl picket porphyrins to the

electroreduction of dioxygen to water: mimicking the

active site of cytochrome c oxidase

AUTHOR(S):

Ricard, David; Didier, Amandine; L'Her, Maurice;

Boitrel, Bernard

CORPORATE SOURCE:

Universite de Bourgogne/LSEO UMR-CNRS 5632, Dijon,

21000, Fr.

SOURCE:

ChemBioChem (2001), 2(2), 144-148

Published in: Angew. Chem., Int. Ed., 40(3)

CODEN: CBCHFX; ISSN: 1439-4227

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 134:337553

Cytochrome c oxidase (CcO), the terminal enzyme of the respiratory chain, performs the 4e- reduction of dioxygen to water in the mitochondria. This reaction is coupled with proton translocation across the membrane. The so-called Fea3-CuB binuclear active site of this enzyme reduces dioxygen to water without any leaking of partially reduced intermediates, such as hydrogen peroxide, which are toxic for the cell. The authors report results about the synthesis and the electrocatalytic activity of quinolinoyl picket porphyrins with or without copper in the distal side of the porphyrin and also with either a tailed or an external nitrogen base to stabilize the iron(II) ion as a five-coordinate complex. These new picket porphyrins are efficient catalysts for the electroredn. of dioxygen to water, with or without copper in the distal side of the porphyrin and whether or not a tailed nitrogen base stabilizes iron(II) as a five-coordinate complex.

IT 338445-15-1P

RL: BSU (Biological study, unclassified); CAT (Catalyst use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(3-quinolinoyl picket porphyrins synthesis and electroredn. of oxygen to water as cytochrome oxidase active site mimic)

RN 338445-15-1 CA

CN 3-Quinolinecarboxamide, N,N',N''-[[20-[2-(acetylamino)phenyl]-21H,23H-porphine-5,10,15-triyl]tri-2,1-phenylene]tris-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L23 ANSWER 16 OF 128 CA COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         134:252658 CA
                         Preparation of tyrosine derivatives as inhibitors of
TITLE:
                         α4 containing integrin-mediated binding to ligands
                         VCAM-1 and MAdCAM.
                         Jackson, David Y.; Sailes, Frederick C.; Sutherlin,
INVENTOR(S):
                         Daniel P.
PATENT ASSIGNEE(S):
                         Genentech, Inc., USA
SOURCE:
                         PCT Int. Appl., 86 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                         KIND DATE
                                            APPLICATION NO.
    ______
                         _ _ _ _
                                            ______
                                -----
                                20010329 WO 2000-US26326
    WO 2001021584
                         A1
                                                                    20000925 <--
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2385882
                          A1
                                20010329
                                          CA 2000-2385882
                                                                    20000925 <--
     EP 1214292
                                            EP 2000-965417
                          Α1
                                20020619
                                                                    20000925 <--
    EP 1214292
                                20070613
                          В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
                                                                    20000925 <--
    US 6469047
                          B1
                                20021022
                                            US 2000-669779
    JP 2003509488
                          Т
                                20030311
                                            JP 2001-524964
                                                                    20000925
    AU 780385
                                            AU 2000-76138
                          В2
                                20050317
                                                                    20000925
    AT 364592
                                            AT 2000-965417
                                20070715
                          Т
                                                                    20000925
    US 2004110753
                                            US 2002-198328
                         A1
                                20040610
                                                                    20020716
     US 2004158076
                                            US 2004-772678
                          A1
                                20040812
                                                                    20040204
                                                                 P 19990924
PRIORITY APPLN. INFO.:
                                            US 1999-156062P
                                            US 2000-669779
                                                                 A1 20000925
                                            WO 2000-US26326
                                                                 W 20000925
                                            US 2002-198328
                                                                 A1 20020716
                         MARPAT 134:252658
OTHER SOURCE(S):
     Tyrosine derivs., e.g., ArCH2CH[N(A)(Z)]CO-Y[Z = H, alkyl; A =
AΒ
     B(CH2)q-X-, where B = (un)substituted Ph and <math>X = CO, SO2, null or B = CO
     cyanoalkyl, carbocyclyl or heterocyclyl and X = CO; R6 = H, alkyl, amino,
     cyano, hydroxy, alkylsulfonyl, etc.; q = 0-3; Y is H, (un)substituted
     alkoxy, alkoxyalkoxy, aryloxy, alkylaminoalkoxy,
     dialkylaminoalkoxy, alkylamino, arylamino, heterocyclyl or heteroarylalkyl;
    Ar is Ph which has hydroxy, carbonate, thiocarbonate, carbamoyloxy or
     acyloxy groups and optionally other substituents] were prepared as
     inhibitors of \alpha 4 containing integrin-mediated binding to ligands such as
    VCAM-1 and MAdCAM. Methods of synthesis are described and inhibitory
    binding data are tabulated for 416 compds., including N-(o-chlorobenzoyl)-O-(allylcarbamoyl)-L-tyrosine, for which IC50 is < 1.0 micromolar.
    331470-69-0P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
```

(preparation of tyrosine derivs. as inhibitors of  $\alpha$ 4 containing

integrin-mediated binding to ligands VCAM-1 and MAdCAM.)

RN 331470-69-0 CA

CN L-Tyrosine, N-[4-[bis(8-quinolinylsulfonyl)amino]-2-chlorobenzoyl]-, 4-morpholinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 17 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

134:100865 CA

TITLE:

Preparation of 1-(4-quinoly1)-1H-pyrazoles as

agrochemical fungicides

INVENTOR(S):

Emeric, Gilbert; Gary, Stephanie; Gerusz, Vincent; Gourlaouen, Nelly; Hartmann, Benoit; Huser, Nathalie;

Lachaise, Helene; Le Hir De Fallois, Loic; Perez,

Joseph; Wegmann, Thomas

PATENT ASSIGNEE(S):

Aventis CropScience SA, Fr. PCT Int. Appl., 267 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT	NO.			KINI	)	DATE		1	APPL:	ICAT:	I NOI	. 00		DA	ATE		
	<b></b>					-										<b>-</b>		
WO	2001	0023	85		A1		2001	0111	1	WO 2	000-1	FR18:	16		20	00006	529 <-	-
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	
		CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	
		ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	
		SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	
		ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM							
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	ŪĠ,	ZW,	ΑT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
FR	2795	726			A1		2001	0105	]	FR 19	999-8	3596			19	€990£	530 <	-
PRIORITY	Y APP	LN.	INFO	. :					]	FR 19	999-8	3596		7	A 19	99906	530	
OTHER SO	OURCE	(S):			MARI	TAS	134:	1008	65									
GI																		

R1R2 [I; R1 = (un)substituted 4-quinolyl; R2 = di- or trisubstituted AB pyrazolo] were prepared Thus, MeOCH2COCH2CO2Me was condensed with HC(OMe)2NMe2 and the product cyclocondensed with H2NNH2 to give Me 5-methoxymethylpyrazole-4-carboxylate which was N-arylated by 4-chloro-8-trifluoromethylquinoline to give title compound II. Data for biol. activity of I were given.

IT 318492-76-1P

> RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic

$$_{N}$$
 $_{N}$ 
 $_{N}$ 
 $_{N}$ 
 $_{CH_{2}}$ 
 $_{N}$ 
 $_{C-OMe}$ 
 $_{O}$ 

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L23 ANSWER 18 OF 128

ACCESSION NUMBER:

134:86170 CA

TITLE:

Quinoline-indole antimicrobial agents

INVENTOR(S):

Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael Z.; Kumaravel, Gnanasambandam;

Melikian-badalian, Anita; Rossi, Richard F.

PATENT ASSIGNEE(S):

Sepracor, Inc., USA

SOURCE:

U.S., 151 pp., Cont.-in-part of U.S. Ser. No. 45,051.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6172084	B1	20010109	US 1998-99640	19980618 <
US 6207679	B1	20010327	US 1998-45051	19980319 <
US 6103905	Α	20000815	US 1998-213385	19981211 <
US 6376670	B1	20020423	US 2000-658690	20000908 <
PRIORITY APPLN. INFO.:	•		US 1997-878781 B:	2 19970619
			US 1998-45051 A:	2 19980319
			US 1998-99640 A	2 19980618
			US 1998-213385 A	l 19981211
			US 2000-639622 A	2 20000815

OTHER SOURCE(S):

MARPAT 134:86170

Ι

GI

$$R^4$$
 $R^5$ 
 $R^3$ 
 $R^6$ 
 $R^7$ 

$$H_2C-O-CH_2$$
 $Br$ 
 $N$ 
 $H_2C-O-CH_2$ 
 $Br$ 

II

Indolylquinolines I [X = N; Y = NR; R-R3 = independently H, halogen, alkyl, alkenyl, alkynyl, OH, alkoxy, silyloxy, NH2, NO2, SH, alkylthio, AB imino, amido, phosphoryl, phosphonate, phosphine, CO, CONH2, anhydride, silyl, alkylsulfonyl, arylsulfonyl, alkylseleno, aldehyde, ester,

heteroalkyl, CN, guanidine, amidine, acetal, ketal, amine oxide, (hetero)aryl, azide, aziridine, carbamate, epoxide, C(:NH)OH, imide, oxime, SO2NH2, CSNH2, thiocarbamate, urea, thiourea, or (CH2)mR80; R4R5, R6R7 = atoms required to complete an (un)substituted fused benzo ring system; R80 = (un)substituted aryl, cycloalkyl, cycloalkenyl, heterocycle, or polycycle; m = 0-8] were prepared by conventional or combinatorial synthetic methods for use as bactericides. Thus, 4-H2NCH2C6H4CO2H was esterified, N-tert-butoxycarbonylated, reduced, and treated with iodine to give 4-BocNHCH2C6H4CH2I, which was coupled with the indolylquinolinemethanol fragment and deblocked to give the product II. II had MIC's <7  $\mu g/mL$  against methicillin-resistant Staphylococcus aureus, vancomycin-resistant Enterobacter sp., and Streptococcus pneumoniae.

IT 218463-49-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indolylquinoline bactericides by conventional or combinatorial methods)

RN 218463-49-1 CA

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 19 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

133:362761 CA

TITLE:

SOURCE:

Synthesis and Opioid Receptor Affinity of a Series of 2,4-Diaryl-Substituted 3,7-Diazabicyclononanones

AUTHOR(S):

Siener, Tom; Cambareri, Antonella; Kuhl, Ulrich; Englberger, Werner; Haurand, Michael; Koegel, Babette;

Holzgrabe, Ulrike

CORPORATE SOURCE:

Institute of Pharmacy and Food Chemistry, University

of Wuerzburg, Wuerzburg, 97074, Germany Journal of Medicinal Chemistry (2000),

43(20), 3746-3751

CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society

PUBLISHER: DOCUMENT TYPE:

Journal English

LANGUAGE: OTHER SOURCE(S):

CASREACT 133:362761

GI

AB 3,7-Diazabicyclo[3.3.1]nonan-9-ones (I; R = Me, Et; Ar = 2-, 3-, 4-pyridinyl; 1-, 2-naphthalenyl; 2-, 4-quinolinyl; substituted phenyl) were synthesized using a double Mannich procedure. Radioligand binding assays were performed to measure the affinity of the compds. to the  $\mu$ -,  $\delta$ -, and  $\kappa$ -opioid receptors. The affinity of all 2,4-diphenyl-substituted 3,7-diazabicyclo[3.3.1]nonan-9-ones to the  $\mu$ - and  $\delta$ -receptors was found to be low. In contrast, with exception of the nitrophenyl- and cyanophenyl-substituted compds., most of the diazabicycles showed considerable affinity for the  $\kappa$ -receptor. In particular, the m-fluoro-, p-methoxy-, and m-hydroxy-substituted compds. have an affinity in the submicromolar range. Because of solubility problems in aqueous media, salts of HZ2 (I; R = Me, Ar = 2-pyridinyl) were synthesized. The methiodide shows high  $\kappa$ -affinity and may, thus, be a promising candidate for development of a peripheral  $\kappa$ -agonist, e.g., for use

IT 250339-62-9P

in the case of rheumatoid arthritis.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and opioid receptor affinity of 2,4-diaryl-3,7-diazabicyclononanones)

RN 250339-62-9 CA

CN 3,7-Diazabicyclo[3.3.1]nonane-1,5-dicarboxylic acid, 3,7-dimethyl-9-oxo-2,4-di-4-quinolinyl-, dimethyl ester, (1R,2R,4S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 20 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

133:281853 CA

TITLE:

A Novel Rhombohedral Grid Based on Tetraorganodistannoxane as Corner Unit

AUTHOR (S):

Xiong, Ren-Gen; Zuo, Jing-Lin; You, Xiao-Zeng; Fun,

Hoong-Kun; Raj, S. Shanmuga Sundara

CORPORATE SOURCE:

Coordination Chemistry Institute State Key Laboratory

of Coordination Chemistry, Nanjing University,

Nanjing, 210093, Peop. Rep. China

SOURCE:

Organometallics (2000), 19(20), 4183-4186

CODEN: ORGND7; ISSN: 0276-7333

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 133:281853

AΒ Under hydrothermal conditions, the reaction of vanillic acid with trimethyltin chloride gives rise to a novel 2D rhombohedral grid,  $\{([Me2Sn(VA)0.5]20)2\cdot 2H20\}n(1), with a tetraorganodistannoxane as$ corner unit.

299433-75-3P IT

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation, fluorescence, and crystal structure of)

RN 299433-75-3 CA

Tin, octamethyldi- $\mu$ 3-oxobis[ $\mu$ -(4-quinolinecarboxylato-CN  $\kappa 04: \kappa 04')$ ] bis (4-quinolinecarboxylato- $\kappa 04$ ) tetra-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

133:4634 CA

TITLE:

Synthesis of conformationally constrained analogues of

KN62, a potent antagonist of the P2X7-receptor

AUTHOR (S):

Baraldi, Pier Giovanni; Romagnoli, Romeo; Tabrizi,

Mojgan Aghazadeh; Falzoni, Simonetta; Di Virgilio,

Francesco

CORPORATE SOURCE:

Dipartimento di Scienze Farmaceutiche, Universita di

Ferrara, Ferrara, I-44100, Italy

SOURCE:

Bioorganic & Medicinal Chemistry Letters (2000

), 10(7), 681-684

CODEN: BMCLE8; ISSN: 0960-894X

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

GI

AB Conformationally constrained analogs of KN62 containing 1,2,3,4-tetrahydro-7hydroxyisoquinoline-3-carboxylic acid with S configuration in position 3, e.g. I, were synthesized and their antagonist activities were tested on human macrophage cells. While KN62 is a potent antagonist of the P2X7 receptor, these analogs were inactive as antagonists and only one compound showed appreciable activity as P2X7 antagonist, which was 30 times weaker than that reported for KN62.

271248-06-7P IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn and structure-activity relationship of

Ι

hydroxyisoquinolinylcarbonylphenylpiperazine arylsulfonates as P2X7-receptor antagonist)

RN 271248-06-7 CA

CN 5-Quinolinesulfonic acid, (3S)-1,2,3,4-tetrahydro-3-[(4-phenyl-1piperazinyl)carbonyl]-2-(5-quinolinylsulfonyl)-7-isoquinolinyl ester (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 22 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

132:49888 CA

TITLE:

Cyclic hydroxamic acids as metalloproteinase

inhibitors

INVENTOR(S):

Xue, Chu-Baio; Decicco, Carl P.; He, Xiaohua

PATENT ASSIGNEE(S):

Du Pont Pharmaceuticals Company, USA

SOURCE:

PCT Int. Appl., 222 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent

DANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT NO	Ο.		KIND		DATE		i	APPL	ICAT	ION :	NO.		D.	ATE		
WO	996586	57				1999	1223	7	WO 1	 999-1	US13	723		1	9990	617	< - <b>-</b>
	W: . F	AU, BR	, CA,	CN,	CZ,	EE,	HÜ,	IL,	IN,	JP,	KR,	LT,	LV,	MX,	NO,	NZ,	
	I	PL, RO	, SG,	SI,	SK,	TR,	UA,	VN,	ZA,	AM,	AZ,	BY,	KG,	ΚŻ,	MD,	RU,	
	ı	IJ, TM															
	RW: A	AT, BE	, CH,	CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	
	F	PT, SE															
CA	233355	54		A1	:	1999	1223	(	CA 1	999-	2333	554		1	9990	617	<
AU	994692	23		A	:	2000	0105		AU 1	999-	4692	3		1	9990	617	<
EP	108793	37		A1	:	2001	0404	]	EP 1	999-	9303	71		1	9990	617	<
	R: <i>P</i>	AT, BE	, CH,	DĒ,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙĖ,	
	9	SI, LT	, LV,	FI,	RO	•		•	•	•	,	•	•		•	·	
JР	200251	L8368		T	:	2002	0625		JP 2	000-	5546	94		1	9990	617	<
US	642921	L3		В1	:	2002	0806	Ţ	JS 1	999-	3350	86		1	9990	617	<
US	200313	39597		A1	:	2003	0724	1	JS 2	002-	1772	35		2	0020	620	
US	685862	26		B2	:	2005	0222										
PRIORITY	Y APPLN	I. INF	0.:					Ţ	JS 1	998-	8955	7P	1	P 1	9980	617	
								. 1	JS 1	999-	1275	99P	1	P 1	9990	402	
										-	3350				9990		
											US13				9990		
OTHER SO	OURCE (S	S):		MARP	TA	132:	49888							_			

Ι

GI

AB Title cyclic hydroxamic acids were prepared which are useful as metalloprotease inhibitors (no data). Thus, trans-1,2-cyclopentanedicarboxylic acid was amidated with 4-phenylpiperidine and treated with NH2OH to give the hydroxamide I.

IT 252918-30-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyclic hydroxamic acids as metalloproteinase inhibitors)

RN 252918-30-2 CA

CN 1-Piperidinecarboxylic acid, 3-[(hydroxyamino)carbonyl]-4-[[[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]amino]carbonyl]-, 4-quinolinylmethyl ester, (3R,4S)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L23 ANSWER 23 OF 128

ACCESSION NUMBER:

131:350972 CA

TITLE:

Conformational and configurational behavior of κ-agonistic 3,7-diazabicyclo[3.3.1]nonan-9-onessynthesis, nuclear magnetic resonance studies and

semiempirical PM3 calculations

AUTHOR (S):

Siener, Tom; Holzgrabe, Ulrike; Drosihn, Susanne;

Brandt, Wolfgang

CORPORATE SOURCE:

Am Hubland, Institut fur Pharmazie und

Lebensmittelchemie, Universitat Wurzburg, Wurzburg,

D-97074, Germany

SOURCE:

Journal of the Chemical Society, Perkin Transactions

2: Physical Organic Chemistry (1999), (9),

1827-1834

CODEN: JCPKBH; ISSN: 0300-9580

PUBLISHER: DOCUMENT TYPE: Royal Society of Chemistry Journal

English

LANGUAGE:

2,4-Diaryl substituted 3,7-diazabicyclo[3.3.1]nonan-9-one 1,5-diesters AΒ were found to have a high affinity for  $\kappa\text{-opioid}$  receptors. To develop highly potent analgesics, the purpose of this study was the synthesis and the structural characterization of the novel 2,4-bis(4-nitrophenyl), 2,4-bis(3-nitrophenyl), 2,4-bis(4-quinolyl), 2,4-bis(2-quinoly1), 2,4-bis(1-naphthy1) and 2,4-bis(2-naphthy1) substituted 3,7-diazabicyclo[3.3.1] nonan-9-one 1,5-diesters by means of NMR spectroscopy and mol. modeling. Several derivs. undergo trans-cis isomerization of the aromatic rings linked to the rigid skeleton whereas others show rotational isomerization. Semiempirical quantum-chemical PM3 calcns. were performed to analyze the thermodn. stability of the isomers as well as the mechanism of the trans-cis or cis-trans isomerization.

TT 250339-69-6

RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent) (synthesis, NMR studies and semiempirical PM3 calcns. of of κ-agonistic 3,7-diazabicyclo[3.3.1]nonan-9-ones)

RN 250339-69-6 CA

4-Quinolinemethanaminium, N-methyl-N-(4-quinolinylmethylene)- $\alpha$ -CN [1,2,3,6-tetrahydro-4-hydroxy-3,5-bis(methoxycarbonyl)-1-methyl-3pyridinyl] - (CA INDEX NAME)

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L23 ANSWER 24 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

131:170370 CA

Preparation of N-acyl cyclic amine compounds as TITLE:

inhibitors of IgE production

INVENTOR(S):

Ishiwata, Hiroyuki; Sato, Seiichi; Kabeya, Mototsugu; Oda, Soichi; Hattori, Yukio; Suda, Makoto; Shibasaki,

Manabu; Nakao, Hiroshi; Nagoya, Takao

PATENT ASSIGNEE(S):

Kowa Co., Ltd., Japan PCT Int. Appl., 83 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT NO.			KINI	)	DATE			API	PLI	CAT	ION I	NO.		I	DATE		
	9942446															19990	216	<
	W: AL,	AM,	ΑT,	AU,	ΑZ	, BA,	BB,	BG	, BI	₹,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	,
	DK,	EE,	ES,	FI,	GB	, GD,	GE,	GH	, GI	ν, .	HR,	HU,	ID,	IL,	IN,	IS,	JP,	,
	KE,	KG,	KR,	ΚZ,	LC	, LK,	LR,	LS	, L:	Γ,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	,
	MX,	NO,	NZ,	PL,	PT	, RO,	RU,	SD	, SI	Ξ,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	,
	TT,	UΑ,	ΰĠ,	US,	UZ	, VN,	YU,	zw										
	RW: GH,	GM,	KE,	LS,	MW	, SD,	SZ,	UG	, ZV	V,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	,
	FI,	FR,	GB,	GR,	ΙE	, IT,	LU,	MC	, NI	Ŀ,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	,
	CM, 2320971 9924408 747815	GA,	GN,	GW,	ML	, MR,	ΝE,	SN	, TI	Ο,	TG							
CA	2320971			Al		1999	0826		CA	19	99-	2320	971		1	9990	216	<
AU	9924408			Α		1999	0906		ΑU	19	99-	2440	8		1	.9990	216	<
AU	747815			B2		2002	0523									-		
BR	9908105			Α		2000	1017		BR	19	99-	8105			]	9990	216	<
	1057815								ΕP	19	99-	9039:	25		]	9990	216	<
	1057815																	
	R: AT,	BE,	CH,	DE,	DK	, ES,	FR,	GB	, GI	₹,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	,
		FI,																
HU	20010044	32		A2		2002	0429		HU	20	01-	4432			1	.9990	216	<
NZ	505912			Α		2002	0927		NZ	19	99-	5059	12		1	.9990	216	<
CN	1114591			В		2003	0716											
RU	2220140			C2		2003	1227		RU	20	00-	1240	97		3			
AT	372320			Т		2007	0915		AT	19	99-	9039:	25		1	.9990	216	
TW.	587077			В		2004	0511		TW	19	99-	8810	2504		1	.9990	219	
МО	2220140 372320 587077 20000040	92		Α		2000	0816		ИО	20	00-	4092			2	0000	816	<
NO	317422			BI		2004	1025											
	2000PA08																	<
US	20030968	28		A1		2003	0522		US	20	02-	1736'	70		2	0020	619	
US	6645957			В2		2003	1111											
PRIORITY	APPLN.	INFO	. :													9980		
																.9990		
									US	20	00-	6225	86	1	A3 2	0000	821	
OTHER SO	OURCE(S):			MARF	TA	131:	17031	70										

GI

$$A-z-C-y (CH2)m B-y-x-y-y (CH2)m N-C-z-A (CH2)n I$$

$$R-N$$
 $N-CH_2CH_2-N$ 
 $N-R$ 
II

AΒ Cyclic amine amides such bis(N-acylpiperazine), bis(N-acylpiperidine), and bis (N-acyl-1, 4-diazepine) compds. represented by general formula [I; wherein A represents an optionally substituted alicyclic, aromatic, or heterocyclic compound; B represents nitrogen or CH; X represents optionally substituted lower alkylene or optionally substituted divalent residue of alicyclic, aromatic, or heterocyclic compound; Y represents a single bond, lower alkylene, NH, lower alkylimino; Z represents CH:CH, C.tplbond.C, (CH:CH)2, C.tplbond.CCH:CH, CH:CHC.tplbond.C, or an optionally substituted divalent residue of benzene, pyridine, pyrimidine, or pyrazine; and m and n are each an integer of 1 to 4] are prepared Because of having an excellent IgE antibody production inhibitory effect, these compds. are useful as antiallergic agents for the treatment of allergic immune diseases such as asthma, atopic dermatitis, allergic rhinitis, inflammatory colon diseases, contact skin diseases, and allergic eye diseases. Thus, (E,E)-5-(3,4,5-trimethoxyphenyl)-2,4-pentadienoic acid was treated with oxalyl chloride in DMF /CH2Cl2 at room temperature for 30 min and then condensed

with 1,3-bis(piperazin-1-yl)propane (II; R=H) tetrahydrochloride in the presence of diisopropylethylamine in CH2Cl2 to give II (R=Q), which at 10-6 M inhibited by 100% the production of IgE in B cell from mouse (Balb/C) spleen.

IT 239066-12-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-acyl cyclic amine compds. as inhibitors of IgE production

for

treatment and prevention of allergic immune diseases)

RN 239066-12-7 CA

CN 4,4'-Bipiperidine, 1,1'-bis[(2E)-1-oxo-3-(3-quinolinyl)-2-propenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 25 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

130:231361 CA

TITLE:

Structural Characterization of a Tris-salicylate Coordination for Iron(III) with the Tripodal Ligand

AUTHOR (S):

Serratrice, Guy; Baret, Paul; Boukhalfa, Hakim;

Gautier-Luneau, Isabelle; Luneau, Dominique; Pierre,

Jean-Louis

CORPORATE SOURCE:

Laboratoire de Chimie Biomimetique, Universite Joseph

Fourier, Grenoble, 38041, Fr.

SOURCE:

Inorganic Chemistry (1999), 38(5), 840-841

CODEN: INOCAJ; ISSN: 0020-1669

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Tris-bidentate tripodal ligand O-TRENSOX (LH7+ in protonated form), containing AB three 8-hydroxyquinoline-5-sulfonate subunits connected to a tris(2-aminoethyl)amine framework via amide linkages at the ortho (7-) positions relative to their hydroxy groups, was reacted with ferric perchlorate hydrate in 1 M HClO4 to afford crystalline iron(III) complex [FeLH4]ClO4·6.5H2O. An x-ray crystal structure study revealed a facial isomer of tris-salicylate coordination for Fe(III) in slightly distorted octahedral geometry. Six O atoms coordinated to Fe(III) are H bonded either to the quinolinium or to the tertiary N atoms and create a cavity which tightly fits the metal and, consequently, stabilizes the structure in highly acidic medium (≤ 2 M HClO4).

IT 169209-68-1

> RL: RCT (Reactant); RACT (Reactant or reagent) (complexation with iron(III))

169209-68-1 CA RN

5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-CNethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

OH

$$CH_2$$
 $SO_3H$ 
 $CH_2$ 
 $C$ 

**3** Na

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 26 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 130:191789 CA

Glycyrrhizic acid and some of its derivatives as TITLE:

psychoactive agents

AUTHOR(S): Tolstikova, T. G.; Baltina, L. A.; Tolstikov, G. A.

CORPORATE SOURCE: Inst. Org. Khim., Ufimsk. Nauchnogo Tsentra Ross.

Akad. Nauk, Ufa, Russia

Doklady Akademii Nauk (1998), 358(4), SOURCE:

MAIK Nauka

558-560

CODEN: DAKNEQ; ISSN: 0869-5652

PUBLISHER:

Journal

DOCUMENT TYPE:

LANGUAGE: Russian

Psychotropic activities are reported for tris-amides of glycyrrhizic acid AΒ with 3-aminoquinoline, 6-aminoquinoline, and 2-amino-4-phenylthiazole. Tests performed included orientation response, hexenal sleep, chloral hydrate sleep, phenamine and apomorphine stereotypy, phenamin toxicity, and interactions with the tranquilizer seduxen.

IT 170277-51-7

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(glycyrrhizic acid and its tris-amides as psychoactive agents)

RN 170277-51-7 CA

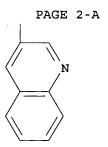
CN  $\alpha$ -D-Glucopyranosiduronamide,  $(3\beta, 20\beta)$ -11,29-dioxo-29-(3quinolinylamino) olean-12-en-3-yl N-3-quinolinyl-2-0-(N-3-quinolinyl-β-D-glucopyranuronamidosyl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

\_OH

....ОН





L23 ANSWER 27 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

130:168399 CA

TITLE:

Preparation of ring-bridged bis-quinolines for the

treatment of degenerative diseases of the central

nervous system

INVENTOR(S):

Schohe-Loop, Rudolf; Seidel, Peter-Rudolf; Bullock,

William; Feurer, Achim; Terstappen, Georg;

Schuhmacher, Joachim; Vander Staay, Franz-Josef;

Schmidt, Bernard; Fanelli, Richard J.; Chisholm, Jane

C.; McCarthy, Richard T.

PATENT ASSIGNEE(S): .

Bayer A.-G., Germany

SOURCE:

GI

U.S., 14 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	,			<b></b>
US 5866562	Α	19990202	US 1996-738123	19961025 <
PRIORITY APPLN. INFO.:			US 1996-738123	19961025
OTHER SOURCE(S):	CASREA	CT 130:16839	9; MARPAT 130:168399	

# \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

- The title compds. [I; A, A1, D, D1, E, E1, G, G1, L, L1 = H, cyclopropyl, AB cyclopentyl, etc.; R1R2 = II-IV (wherein R5, R7 = H, Ph, cyclopentyl, etc.; R6 = H, Me; b = 1-3; R8, R9 = H; or R8 = H, and R9 = R5), etc.] and their salts, useful for the treatment of degenerative diseases such as dementia, were prepared Thus, general procedure for preparing bis-quinolines I was given. E.g., compound V showed Ki of 35 nM/L against 125-apamine binding to bovine cerebral membranes and 73% inhibition of the Rb efflux at 10  $\mu M$ .
- 220364-70-5P IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ring-bridged bis-quinolines for the treatment of degenerative diseases of the central nervous system)

220364-70-5 CA RN

1H-1,4-Diazepine-6-carboxamide, hexahydro-1,4-bis(2-methyl-4-quinolinyl)-(CA INDEX NAME)

28

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 28 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 130:81422 CA

TITLE: Quinoline-indole antimicrobial agents

INVENTOR(S): Kumaravel, Gnanasambandam; Hoemann, Michael Z.; Melikian-Badalian, Anita; Cuny, Gregory D.; Hauske,

James R.; Heefner, Donald L.; Rossi, Richard F.

PATENT ASSIGNEE(S): Sepracor, Inc., USA

SOURCE: PCT Int. Appl., 146 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

	CENT															ATE		
	9857																	<
WO	9857	931			A3		1999	0429		•								
	W:	AL,	AM,	AT,	AU,	ΑZ,	BB,	BG,	ВŔ,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	DK,	
		EE,	ES,	FI,	GB,	GE,	GH,	BM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,	ΚP,	
							LS,											
							SE,											
					YU,													
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	
							IT,											
		CM,	GΑ,	GN,	ML,	MR,	ΝE,	SN,	TD,	TG								
US	6207	679			В1		2001	0327		US 1	998-	4505	1		1	9980	319	<
	2293																	
EP	9916	23			A2		2000	0412		EP 1	998-	9303	96		1:	9980	618	<
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	FI															
HU	2000	0033	64		A2		2001	0628		HU 2	000-3	3364			1	9980	618	<
HU	2000	0033	64		A3		2002	0328										
JP	2002	5056	89		${f T}$		2002	0219		JP 1	999-	5048	35		1	9980	618	<
AU	7570	59			B2		2003	0130		AU 1	998-	7979	7		1	9980	518	
NO	9906	269			A		2000	0216	:	NO 1	999-	6269			1:	9991:	217	<
PRIORITY	APP	LN.	INFO	. :					,	US 1	997-	8787	81		A 1:	9970	519	
									•	US 1	998-	4505	1	i	A2 1	9980	319	
									,	WO 1	998-1	US12	762	1	W 1	9980	618	
OTHER SO	OURCE	(S):			MAR	TAS	130:	8142	2									

$$R^4$$
 $R^3$ 
 $R^6$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 

Indolylquinolines I [X = (un)substituted CH, N, N(O), P, As; Y = AB

GI

(un) substituted CH2, NH, O, Ph, S, AsH, Se; R1-R3 = H, halogen, alkyl, alkenyl, alkynyl, OH, alkoxy, silyloxy, NH2, NO2, SH, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, CO, CO2H, CONH2, anhydride, silyl, alkylsulfonyl, alkylseleno, aldehyde, ester, heteroalkyl, CN, epoxide, C(:NH)OH, oxime, SO2NH2, CSNH2, CS2NH2, urea, thiourea; R4R5, R6R7 = atoms required to complete a moncyclic or polycyclic ring system] were prepared individually or by combinatorial synthesis for use as bactericides. Thus, 4-H2NC6H4CO2H was esterified, N-tert-butoxycarbonylated, reduced and treated with iodine to give 4-BocNHC6H4CH2I which was coupled with the indolylquinolinemethanol fragment and deblocked to give the product II. II had MIC's <7  $\mu g/mL$  against methicillin-resistant Staphylococcus aureus, vancomycin-resistant Enterobacter sp., and Streptococcus pneumoniae.

IT 218463-49-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indolylquinoline bactericides)

RN 218463-49-1 CA

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

L23 ANSWER 29 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 130:81421 CA

TITLE: Preparation of indolyl(iso)quinolines as bactericides

INVENTOR(S): Kumaravel, Gnanasambandam; Hoemann, Michael Z.;

Melikian-Badalian, Anita; Cuny, Gregory D.; Hauske,

James R.; Heefner, Donald L.; Rossi, Richard F.

PATENT ASSIGNEE(S): Sepracor Inc., USA

SOURCE:

PCT Int. Appl., 138 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

	PAT	CENT	NO.			KIN	D :	DATE			APPL	ICAT	ION	NO.		D	ATE	
	WO	9857	952			A1	-	 1998	1223	,	WO 1:	 998-1	US12	706		1:	 9980	 618 <
		W:	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KΕ,	KG,
			KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
			NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
			UA,	ŪĠ,	US,	UZ,	VN,	YU,	zw									
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,	DE,	DK,	ES,
			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
			CM,	GΑ,	GN,	ML,	MR,	NE,	SN,	TD,	TG							
	AU	9882	586			Α		1999	0104		AU 1	998-	8258	6		1	9980	618 <
PRI	ORITY	APP	LN.	INFO	. :					;	US 1:	997-	8787	81		A2 1	9970	619
										1	WO 1	998-1	US12	706	1	W 1	9980	618
										_								

OTHER SOURCE(S):

MARPAT 130:81421

GI

$$R^7$$
 $X$ 
 $R^2$ 
 $R^5$ 
 $R^4$ 
 $R^1$ 
 $R^3$ 

AB Title compds. [I; X = CR, N, NO, P, As; Y = CR2, NR, O, PR, S, AsR, Se; R,R1-R3 = H, halo, alkyl, alkoxy, etc.; R4R5,R6R7 = atoms to complete (un)substituted rings] were prepared Thus, solid-phase synthesis of a 1-(3-indolyl)isoquinoline-3-aminoalkylcarboxamide was described. Data for biol. activity of I were given.

IT 218463-49-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indolyl(iso)quinolines as bactericides)

RN 218463-49-1 CA

CN Piperazine, 1,1'-(1,4-dioxo-1,4-butanediyl)bis[4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 30 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

130:38708 CA

TITLE:

Preparation of 4-(4-chlorophenyl)benzyl-A 82846B derivative and related compounds as antibiotics

INVENTOR (S):

Cooper, Robin D. G.; Huff, Bret E.; Nicas, Thalia I.; Quatroche, John T.; Rodriguez, Michael J.; Snyder, Nancy J.; Staszak, Michael A.; Thompson, Richard C.;

Wilkie, Stephen C.; Zweifel, Mark J.

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

U.S., 28 pp., Cont.-in-part of U.S. Ser. No. -356,413,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

Fildi

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

US 5840684 A 19981124 US 1995-410155 19950324 < AU 9511389 A 19950810 AU 1995-11389 19950124 < AU 703106 B2 19990318  ZA 9500553 A 19960724 ZA 1995-553 19950124 < RU 2145609 C1 20000220 RU 1995-101039 19950124 < TW 457248 B 20011001 TW 1995-84100590 19950124 < IN 1995CA00063 A 20050311 IN 1995-CA63 19950124 < IN 1995CA00063 A 19950728 HU 1995-230 19950125 < HU 225164 B1 20060728  CA 2141106 A1 19950729 CA 1995-2141106 19950125 < CA 2141106 C 20070123  CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 25466910 A1 19950729 CA 1995-2546625 19950125 < CA 248856 T 20030915 AT 2000-200988 19950125 AT 248856 T 20031115 AT 1995-300429 19950125 PT 1016670 T 20031231 PT 2000-200988 19950125 PT 667353 T 20040311 PT 1995-300429 19950125 ES 2204444 T3 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
AU 9511389 A 19950810 AU 1995-11389 19950124 < AU 703106 B2 19990318  ZA 9500553 A 19960724 ZA 1995-553 19950124 < RU 2145609 C1 20000220 RU 1995-101039 19950124 < RU 457248 B 20011001 TW 1995-84100590 19950124 < IN 1995CA00063 A 20050311 IN 1995-CA63 19950124 HU 68715 A2 19950728 HU 1995-230 19950125 < HU 225164 B1 20060728 CA 2141106 C 20070123 CA 2546625 A1 19950729 CA 1995-2141106 19950125 < CA 25466910 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546625 19950125 < CA 248856 T 20030915 AT 2000-200988 19950125 AT 253077 T 20031115 AT 1995-300429 19950125 CZ 292895 B6 20031217 CZ 1995-184 19950125 CZ 292895 B6 20031217 CZ 1995-184 19950125 CT 1016670 T 20031231 PT 2000-200988 19950125 CT 667353 T 20040331 PT 1995-300429 19950125 CS 2204444 T3 20040501 ES 2000-200988 19950125 CS 2204444 T3 20040501 ES 2000-200988 19950125 CS 2210274 T3 20040515 AT 2000-201724 19950125 CS 2210274 T3 20040831 PT 2000-201724 19950125 CS 2210274 T3 20040831 PT 2000-201724 19950125 CS 2210274 T3 20040831 PT 2000-201724 19950125
AU 703106 B2 19990318  ZA 9500553 A 19960724 ZA 1995-553 19950124 < RU 2145609 C1 20000220 RU 1995-101039 19950124 < RU 2145609 B 20011001 TW 1995-84100590 19950124 < TW 457248 B 20050311 IN 1995-CA63 19950124 < IN 1995CA00063 A 20050311 IN 1995-CA63 19950125 < HU 225164 B1 20060728  CA 2141106 C 20070123  CA 2141106 C 20070123  CA 2546625 A1 19950729 CA 1995-2141106 19950125 < CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546910 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125  AT 253077 T 20031115 AT 1995-300429 19950125  CZ 292895 B6 20031217 CZ 1995-184 19950125  PT 1016670 T 20031231 PT 2000-200988 19950125  PT 667353 T 20040331 PT 2000-200988 19950125  ES 2204444 T3 20040501 ES 2000-200988 19950125  AT 266042 T 20040515 AT 2000-201724 19950125  ES 2210274 T3 20040701 ES 1995-300429 19950125  PT 1031576 T 20040831 PT 2000-201724 19950125
ZA 9500553       A 19960724       ZA 1995-553       19950124 <
RU 2145609 C1 20000220 RU 1995-101039 19950124 < TW 457248 B 20011001 TW 1995-84100590 19950124 < IN 1995CA00063 A 20050311 IN 1995-CA63 19950124  HU 68715 A2 19950728 HU 1995-230 19950125 < HU 225164 B1 20060728 CA 2141106 C 20070123 CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546625 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125 AT 253077 T 20031115 AT 1995-300429 19950125 PT 1016670 T 20031217 CZ 1995-184 19950125 PT 667353 T 20040331 PT 1995-300429 19950125 ES 2204444 T3 20040501 ES 2000-200988 19950125 ES 2210274 T3 20040831 PT 2000-201724 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125 PT 1031576
TW 457248 B 20011001 TW 1995-84100590 19950124 < IN 1995CA00063 A 20050311 IN 1995-CA63 19950124 < HU 68715 A2 19950728 HU 1995-230 19950125 < HU 225164 B1 20060728  CA 2141106 C 20070123  CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546910 19950125 < CA 248856 T 20030915 AT 2000-200988 19950125  AT 253077 T 20031115 AT 1995-300429 19950125  CZ 292895 B6 20031217 CZ 1995-184 19950125  PT 1016670 T 20031231 PT 2000-200988 19950125  PT 667353 T 20040331 PT 1995-300429 19950125  ES 2204444 T3 20040501 ES 2000-200988 19950125  ES 2210274 T3 20040701 ES 1995-300429 19950125  ES 2210274 T3 20040831 PT 2000-201724 19950125  PT 1031576 T 20040831 PT 2000-201724 19950125
IN 1995CA00063       A       20050311       IN 1995-CA63       19950124         HU 68715       A2       19950728       HU 1995-230       19950125 <
HU 68715 A2 19950728 HU 1995-230 19950125 < HU 225164 B1 20060728  CA 2141106 A1 19950729 CA 1995-2141106 19950125 < CA 2141106 C 20070123  CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546910 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125  AT 253077 T 20031115 AT 1995-300429 19950125  CZ 292895 B6 20031217 CZ 1995-184 19950125  PT 1016670 T 20031231 PT 2000-200988 19950125  PT 667353 T 20040331 PT 1995-300429 19950125  ES 2204444 T3 20040501 ES 2000-200988 19950125  AT 266042 T 20040515 AT 2000-201724 19950125  ES 2210274 T3 20040831 PT 2000-201724 19950125  PT 1031576 T 20040831 PT 2000-201724 19950125
HU 225164 B1 20060728 CA 2141106 A1 19950729 CA 1995-2141106 19950125 < CA 2141106 C 20070123 CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546910 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125 AT 253077 T 20031115 AT 1995-300429 19950125 CZ 292895 B6 20031217 CZ 1995-184 19950125 PT 1016670 T 20031231 PT 2000-200988 19950125 PT 667353 T 20040331 PT 1995-300429 19950125 ES 2204444 T3 20040501 ES 2000-200988 19950125 AT 266042 T 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
CA 2141106 A1 19950729 CA 1995-2141106 19950125 < CA 2141106 C 20070123  CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546910 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125  AT 253077 T 20031115 AT 1995-300429 19950125  CZ 292895 B6 20031217 CZ 1995-184 19950125  PT 1016670 T 20031231 PT 2000-200988 19950125  PT 667353 T 20040331 PT 1995-300429 19950125  ES 2204444 T3 20040501 ES 2000-200988 19950125  AT 266042 T 20040515 AT 2000-201724 19950125  ES 2210274 T3 20040701 ES 1995-300429 19950125  PT 1031576 T 20040831 PT 2000-201724 19950125
CA 2141106 C 20070123  CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546910 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125  AT 253077 T 20031115 AT 1995-300429 19950125  CZ 292895 B6 20031217 CZ 1995-184 19950125  PT 1016670 T 20031231 PT 2000-200988 19950125  PT 667353 T 20040331 PT 1995-300429 19950125  ES 2204444 T3 20040501 ES 2000-200988 19950125  AT 266042 T 20040515 AT 2000-201724 19950125  ES 2210274 T3 20040701 ES 1995-300429 19950125  PT 1031576 T 20040831 PT 2000-201724 19950125
CA 2546625 A1 19950729 CA 1995-2546625 19950125 < CA 2546910 A1 19950729 CA 1995-2546910 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125 AT 253077 T 20031115 AT 1995-300429 19950125 CZ 292895 B6 20031217 CZ 1995-184 19950125 PT 1016670 T 20031231 PT 2000-200988 19950125 PT 667353 T 20040331 PT 1995-300429 19950125 ES 2204444 T3 20040501 ES 2000-200988 19950125 AT 266042 T 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
CA 2546910 A1 19950729 CA 1995-2546910 19950125 < AT 248856 T 20030915 AT 2000-200988 19950125 AT 253077 T 20031115 AT 1995-300429 19950125 CZ 292895 B6 20031217 CZ 1995-184 19950125 PT 1016670 T 20031231 PT 2000-200988 19950125 PT 667353 T 20040331 PT 1995-300429 19950125 ES 2204444 T3 20040501 ES 2000-200988 19950125 AT 266042 T 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
AT 248856 T 20030915 AT 2000-200988 19950125 AT 253077 T 20031115 AT 1995-300429 19950125 CZ 292895 B6 20031217 CZ 1995-184 19950125 PT 1016670 T 20031231 PT 2000-200988 19950125 PT 667353 T 20040331 PT 1995-300429 19950125 ES 2204444 T3 20040501 ES 2000-200988 19950125 AT 266042 T 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
AT 253077 T 20031115 AT 1995-300429 19950125 CZ 292895 B6 20031217 CZ 1995-184 19950125 PT 1016670 T 20031231 PT 2000-200988 19950125 PT 667353 T 20040331 PT 1995-300429 19950125 ES 2204444 T3 20040501 ES 2000-200988 19950125 AT 266042 T 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
CZ 292895       B6       20031217       CZ 1995-184       19950125         PT 1016670       T 20031231       PT 2000-200988       19950125         PT 667353       T 20040331       PT 1995-300429       19950125         ES 2204444       T3 20040501       ES 2000-200988       19950125         AT 266042       T 20040515       AT 2000-201724       19950125         ES 2210274       T3 20040701       ES 1995-300429       19950125         PT 1031576       T 20040831       PT 2000-201724       19950125
PT 1016670       T       20031231       PT 2000-200988       19950125         PT 667353       T       20040331       PT 1995-300429       19950125         ES 2204444       T3       20040501       ES 2000-200988       19950125         AT 266042       T       20040515       AT 2000-201724       19950125         ES 2210274       T3       20040701       ES 1995-300429       19950125         PT 1031576       T       20040831       PT 2000-201724       19950125
PT 667353       T       20040331       PT 1995-300429       19950125         ES 2204444       T3       20040501       ES 2000-200988       19950125         AT 266042       T       20040515       AT 2000-201724       19950125         ES 2210274       T3       20040701       ES 1995-300429       19950125         PT 1031576       T       20040831       PT 2000-201724       19950125
ES 2204444 T3 20040501 ES 2000-200988 19950125 AT 266042 T 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
AT 266042 T 20040515 AT 2000-201724 19950125 ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
ES 2210274 T3 20040701 ES 1995-300429 19950125 PT 1031576 T 20040831 PT 2000-201724 19950125
PT 1031576 T 20040831 PT 2000-201724 19950125
ES 2220335 T3 20041216 ES 2000-201724 19950125
NO 9500298 A 19950731 NO 1995-298 19950126 <
NO 323103 B1 20070102
IL 112457 A 20040620 IL 1995-112457 19950126
FI 9500374 A 19950729 FI 1995-374 19950127 <
FI 117095 B1 20060615
JP 07258289 A 19951009 JP 1995-11847 19950127 <
JP 3756539 B2 20060315
BR 9500365 A 19951017 BR 1995-365 19950127 <
CN 1119649 A 19960403 CN 1995-100041 19950127 <
CN 1071334 B 20010919
PL 180961 B1 20010531 PL 1995-306976 19950127 <
CA 2216167 A1 19961003 CA 1996-2216167 19960314 <
CA 2216167 C 20070717
WO 9630401 A1 19961003 WO 1996-US3550 19960314 <
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI

GI

```
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
     AU 9653121
                           Α
                                 19961016
                                             AU 1996-53121
                                                                      19960314 <--
     EP 817797
                           A1
                                 19980114
                                              EP 1996-909713
                                                                      19960314 <--
     EP 817797
                           В1
                                 20061227
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI
                                 19990302
                                              JP 1996-529455
                                                                      19960314 <--
     JP 11502534
                           Т
     AT 349464
                           Т
                                 20070115
                                              AT 1996-909713
                                                                      19960314
     ES 2274525
                           T3
                                 20070516
                                              ES 1996-909713
                                                                      19960314
                                 19981201
                                              US 1997-816224
                                                                      19970312 <--
     US 5843889
                           Α
     US 5977062
                           Α
                                 19991102
                                              US 1998-62235
                                                                      19980417 <--
                                              CZ 2000-1517
                                 20040114
                                                                      20000425
     CZ 292921
                           В6
     FI 2005000512
                                 20050513
                                              FI 2005-512
                                                                      20050513
                           Α
     FI 117096
                                 20060615
                           В1
     FI 2005000513
                                 20050513
                                              FI 2005-513
                                                                      20050513
                           Α
     FI 117097
                                 20060615
                           В1
                                              US 1994-189393
PRIORITY APPLN. INFO.:
                                                                   B2 19940128
                                                                   B2 19941215
                                              US 1994-356413
                                              CA 1995-2141106
                                                                   A3 19950125
                                              CZ 1995-184
                                                                   A3 19950125
                                              US 1995-410155
                                                                   Α
                                                                      19950324
                                              WO 1996-US3550
                                                                   W
                                                                      19960314
OTHER SOURCE(S):
                         MARPAT 130:38708
```

AB The title compound (I) and related compds., active against a wide variety of bacteria, including activity against vancomycin-resistant isolates, were prepared by condensation of A 82846B with the appropriate aldehydes in polar

I

solvents followed by reduction of the resulting Schiff bases with NaCH3CN. For example, a stirred mixture of 20 g A82846B acetate salt in 1000 mL MeOH was treated under N with 2.88 g 4'-chlorobiphenylcarboxaldehyde followed by 500 mL MeOH, 0.84 g NaBH3CN was added followed by 500 mL MeOH, the whole was refluxed (65°) for 25 h , pH adjusted (1N aqueous NaOH) to 9.0 (54.7°) and the product worked-up to give 22.87 g I which in vitro inhibited Staphylococcus aureus with MIC = 0.06-2  $\mu$ g/mL. Approx. 288 related A 82846B derivs. were prepared and tested, and compound I was claimed. A capsule, suspension and tablet formulation containing I were given.

IT 183669-66-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-(4-chlorophenyl)benzyl-A 82846B and related compds. as antibiotics)

RN 183669-66-1 CA

CN Vancomycin, N3''-(3-quinolinylmethyl)-22-O-[2,3,6-trideoxy-3-C-methyl-3-[(3-quinolinylmethyl)amino]- $\alpha$ -L-arabino-hexopyranosyl]-, (4''R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

Cl\_

REFERENCE COUNT:

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 31 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 129:117796 CA

TITLE: Iron mobilization and cellular protection by a new

synthetic chelator O-Trensox

AUTHOR(S): Rakba, Nafissa; Aouad, Fouad; Henry, Christophe;

Caris, Catherine; Morel, Isabelle; Baret, Paul;

Pierre, Jean-Louis; Brissot, Pierre; Ward, Roberta J.;

Lescoat, Gerard; Crichton, Robert R.

CORPORATE SOURCE: Inserm U 49, Unite de Recherches Hepatologiques,

Rennes, Fr.

SOURCE: Biochemical Pharmacology (1998), 55(11),

1797-1806

CODEN: BCPCA6; ISSN: 0006-2952

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

We tested a new synthetic, 8-hydroxyquinoline-based, hexadentate iron AB chelator, O-Trensox and compared it with desferrioxamine B (DFO). Iron mobilization was evaluated: (i) in vitro by using ferritin and hemosiderin; DFO mobilized iron much more rapidly from ferritin at pH 7.4 than did O-Trensox, whereas at pH 4, ferritin and hemosiderin iron mobilization was very similar with both chelators; (ii) in vitro by using cultured rat hepatocytes which had been loaded with 55Fe-ferritin; here DFO was slightly more effective after 100 h than O-Trensox; (iii) in vivo administration i.p. to rats which had been iron-loaded with iron dextran; O-Trensox mobilized 51.5% of hepatic iron over two weeks compared to 48.8% for DFO. We also demonstrated the effect of O-Trensox in decreasing the entry of 55Fe citrate into hepatocyte cultures. The protective effect of O-Trensox against iron toxicity induced in hepatocyte cultures by ferric citrate was shown by decreased release of the enzymes lactate dehydrogenase (LDH), aspartate aminotransferase (AST), and alanine aminotransferase (ALT) from the cultures and, using ESR (EPR) measurements, decreased production of lipid radicals. O-Trensox was more effective than DFO in quenching hydroxyl radicals in an acellular system:

IT 169209-68-1
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(iron mobilization and cellular protection by synthetic chelator O-Trensox)

RN 169209-68-1 CA

CN 5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

●3 Na

REFERENCE COUNT:

51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 32 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 129:16039 CA

TITLE: Synthesis of 3- and 5'-substituted

flavone-8-carboxylic acids as "three-armed" leukotriene CysLT1 receptor antagonists

AUTHOR(S): Zwaagstra, Mariel E.; Korthouwer, Ronald E. M.;

Timmerman, Henk; Zhang, Ming-Qiang

CORPORATE SOURCE: Division of Medicinal Chemistry, Leiden-Amsterdam

Center for Drug Research, Vrije Universiteit,

Amsterdam, 1081, Neth.

SOURCE: European Journal of Medicinal Chemistry (1998

), 33(2), 95-102

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB Mol. modeling of leukotriene CysLT1 receptor antagonists have suggested that in addition to the two binding sites for a lipophilic and an acidic group, the receptor has a "third pocket" to accommodate "three-armed" ligands such as montelukast. Based on the most rigid CysLTl receptor antagonist 3'-[2-(2-quinolinyl)ethenyl]flavone-8-carboxylic acid, the authors have synthesized 3- and 5'-substituted flavone derivs. to probe this addnl. binding pocket. Introduction of large substituents, e.g. 2-quinolinylmethoxy, to the C5' position of the flavone skeleton abolished the CysLT1 receptor affinity whereas the same modification at the C3 position yielded a potent CysLT1 antagonist. This observation implies that the third binding pocket of the receptor has considerable steric tolerance, probably corresponding to the substituents at C3 of the flavone skeleton. Further modification by introducing a C3 substituent containing a basic nitrogen resulted in flavonecarboxylic acid I with potent H1 antihistaminic activity although the CysLT1 antagonistic activity was much reduced. Further study on the CysLTl receptor recognition of three-armed antagonists may facilitate the design of more effective antiasthmatic agents, e.g. dual antagonists of histamine H1 and leukotriene CysLT1 receptors.

I'

IT 207617-44-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and cysteinyl-leukotriene receptor antagonist activity of flavonecarboxylic acids)

RN 207617-44-5 CA

CN 4H-1-Benzopyran-8-carboxylic acid, 6-bromo-4-oxo-3-(2-quinolinylmethoxy)-2-[3-(2-quinolinylmethoxy)phenyl]- (CA INDEX NAME)

$$CH_2-O$$
 $CO_2H$ 
 $CH_2-O$ 

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 33 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 128:243923 CA

TITLE: Synthesis of 2-mono and 2,6-disubstituted

methyl-1,4-dihydropyridines

AUTHOR(S): Rastgar Mirzaei, Yousef; Akbari Dilmaghani, Karim

CORPORATE SOURCE: Organic Synthesis Research Lab., Faculty of Chemistry,

Tabriz University, Tabriz, 51664, Iran

SOURCE: Iranian Journal of Chemistry & Chemical Engineering (

1997), 16(1), 33-35

CODEN: IJCEE9; ISSN: 1021-9986

PUBLISHER: Jahad Daneshgahi

DOCUMENT TYPE: Journal LANGUAGE: English

AB The 2-mono and 2,6-disubstituted methyl-1,4- dihydropyridines were synthesized by reaction of morpholine, thiophenol, 8-hydroxyquinoline,

2-naphthol and 2-mercapto-1-methylimidazole with 2-bromo-1,4-

dihydropyridines and 2,6-dibromo-1,4-dihydropyridines.

IT. 204852-02-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 204852-02-8 CA

CN 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-4-(3-nitrophenyl)-2,6-bis[(8-quinolinyloxy)methyl]-, diethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 34 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

128:217320 CA

TITLE:

Iodobenzene diacetate mediated synthesis of

N, N'-diacylhydrazines: a convenient synthesis of

1,3,4-oxadiazoles

AUTHOR (S):

Singh, Shiv P.; Batra, Hitesh; Sharma, Pawan K. Dep. Chem., Kurukshetra Univ., Haryana, 119, India

SOURCE:

Journal of Chemical Research, Synopses (1997

), (12), 468-469

CODEN: JRPSDC; ISSN: 0308-2342 Royal Society of Chemistry

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CORPORATE SOURCE:

CASREACT 128:217320

Iodobenzene diacetate was an excellent reagent for the oxidation of acid AB hydrazides to N, N'-diacylhydrazines, which undergo ready cyclization to yield oxadiazoles.

204260-44-6P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(iodobenzene diacetate mediated preparation of N,N'-diacylhydrazines and a convenient preparation of 1,3,4-oxadiazoles)

RN 204260-44-6 CA

1H-Pyrazole-4-carboxylic acid, 5-methyl-1-(4-methyl-2-quinolinyl)-, CN 2-[[5-methyl-1-(4-methyl-2-quinolinyl)-1H-pyrazol-4-yl]carbonyl]hydrazide (CA INDEX NAME)

REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L23 ANSWER 35 OF 128 CA COPYRIGHT 2007 ACS on STN
                        128:192678 CA
ACCESSION NUMBER:
                        Preparation of diamide compounds as IqE production
TITLE:
                        inhibitors
INVENTOR (S):
                        Ishiwata, Hiroyuki; Kabeya, Mototsugu; Shigyo,
                        Hiromichi; Shiratsuchi, Masami; Hattori, Yukio; Nakao,
                        Hiroshi; Nagoya, Takao; Sato, Seiichi; Oda, Soichi; et
                        Kowa Co., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 93 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                      KIND DATE
                                        APPLICATION NO. DATE
    PATENT NO.
    ______
                       --- - -
                       A1 19980226 WO 1997-JP2882
    WO 9807702
                                                               19970820 <--
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ,
            VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
            GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
            GN, ML, MR, NE, SN, TD, TG
                                          AU 1997-38668
    AU 9738668
                        Α
                            19980306
                                                                19970820 <--
                             19990630 EP 1997-935832
    EP 926138
                        Al
                                                                19970820 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
    US 6340682
                                          US 1999-147711
                        B1
                               20020122
                                                                 19990223 <--
    US 2002042414
                        A1
                               20020411
                                          US 2001-978102
                                                                 20011017 <--
    US 6828316
                        B2
                               20041207
PRIORITY APPLN. INFO.:
                                                            A 19960823
                                          JP 1996-222770
                                                            W 19970820
                                          WO 1997-JP2882
                                          US 1999-147711
                                                            A3 19990223
                        MARPAT 128:192678
OTHER SOURCE(S):
    Diamide derivs. ABCOWCOBA [A represents optionally substituted Ph, etc.; B
    represents CH:CH, C.tplbond.C, phenylene, etc.; and W represents
    1,4,8-triazabicyclo[4,4,0]decane, etc.] are prepared The title compds. are
    useful as antiallergic agents, etc. Thus, 1,4-bis[5-phenylpenta-(2E,4E)-
    dienoyl]hexahydro-1,4-diazepine at 10-5 M gave 100% inhibition of IgE
    production in B cells.
IT
    203721-30-6P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of diamide compds. as IgE production inhibitors)
RN
    203721-30-6 CA
CN
    1H-1,4-Diazepine, hexahydro-1,4-bis[1-oxo-5-(3-quinolinyl)-2,4-
    pentadienyl]-, (all-E)- (9CI) (CA INDEX NAME)
```

Double bond geometry as shown.

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 36 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 128:140613 CA

TITLE: Preparation of pyridylpyrroles as interleukin and

tumor necrosis factor antagonists.

INVENTOR(S): Kawai, Akiyoshi; Kawai, Makoto; Murata, Yoshinori;

Takada, Junji; Sakakibara, Minoru

PATENT ASSIGNEE(S): Pfizer Pharmaceuticals Inc., Japan; Pfizer Inc.

SOURCE: PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT NO.		APPLICATION NO.	DATE					
WO			WO 1997-IB703	19970616 <					
	W: AL, AM, AT,	AU, AZ, BA, BB,	BG, BR, BY, CA, CH,	CN, CU, CZ, DE,					
	DK, EE, ES,	FI, GB, GE, HU,	IL, IS, JP, KE, KG,	KP, KR, KZ, LC,					
	LK, LR, LS,	LT, LU, LV, MD,	MG, MK, MN, MW, MX,	NO, NZ, PL, PT,					
	RO, RU, SD,	SE, SG, SI, SK,	TJ, TM, TR, TT, UA,	UG, US, UZ, VN, YU					
	RW: GH, KE, LS,	MW, SD, SZ, UG,	ZW, AT, BE, CH, DE,	DK, ES, FI, FR,					
	GB, GR, IE,	IT, LU, MC, NL,	PT, SE, BF, BJ, CF,	CG, CI, CM, GA,					
•	GN, ML, MR,	NE, SN, TD, TG							
CA	2260213	A1 19980122	CA 1997-2260213	19970616 <					
CA	2260213	C 20050329	CA 1997-2260213						
			AU 1997-30441						
EP	912548	A1 19990506	EP 1997-925215	19970616 <					
			GB, GR, IT, LI, LU,						
			BR 1997-10352						
JP			JP 1998-505790						
		B2 20031014							
IN	1997DE01918		IN 1997-DE1918	19970709					
US	2002049235	A1 20020425	US 1999-214573	19991210 <					
	6417202	B2 20020709							
PRIORITY	APPLN. INFO.:		WO 1996-IB671	A 19960711					
			WO 1997-IB703						
OTHER SO	OURCE(S):	MARPAT 128:1406							

Title compds. [I; R1 = H, R6, R6NH, R6CO, R6NHCO, Ar, ArNH, ArCO, etc.; Ar = (substituted) Ph, naphthyl, pyridyl, quinolyl, thienyl, furyl, pyrrolyl, indolyl, benzothienyl, benzofuryl; R6 = (halo)alkyl; R2, R4 = H, halo, R6, alkenyl, alkynyl, R6NH, R6O, R6S, R6SO, R6SO2, 1,4-dioxa-8-azaspiro[4,5]decanyl, etc.; R3 = alkenyl, alkynyl, halo, hydroxyalkyl, Ar, CHO, CO2H, tetrazolyl, triazolyl, imidazolyl, oxazolyl, thiazolyl, R6CO, R6CONH, ArCONH, etc.; 2 of R2-R4 = atoms to form (substituted) 5-8 membered rings; R5 = H, halo, R6, Ar, ArO, ArS, ArNH, ArCO, R6CO, R6O2C, R6NHCO, etc.; 2 adjacent R5 = atoms to form a (substituted) fused benzene ring; m = 0-4; n = 0, 1], were prepared Thus, 4-pyridinecarboxaldehyde, 2,4-pentanedione, aqueous NH3, and EtOH were refluxed together to give 41%

3-acetyl-4-methyl-2,5-di(4-pyridyl)-1H-pyrrole. Tested I inhibited TNF $\alpha$  biosynthesis with IC50 = 100 nM-10  $\mu$ M.

IT 202285-20-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridylpyrroles as interleukin and tumor necrosis factor antagonists)

RN 202285-20-9 CA

CN Ethanone, 1-(4-methyl-2,5-di-4-quinolinyl-1H-pyrrol-3-yl)- (CA INDEX NAME)

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 37 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

127:239481 CA

TITLE:

O-TRENSOX, a New Tripodal Iron Chelator Based on

8-Hydroxyquinoline Subunits: Thermodynamic and Kinetic

AUTHOR (S):

Serratrice, Guy; Boukhalfa, Hakim; Beguin, Claude; Baret, Paul; Caris, Catherine; Pierre, Jean-Louis

CORPORATE SOURCE:

Laboratoire de Chimie Biomimetique, Universite Joseph

Fourier, Grenoble, Fr.

SOURCE:

Inorganic Chemistry (1997), 36(18),

3898-3910

CODEN: INOCAJ; ISSN: 0020-1669

American Chemical Society

DOCUMENT TYPE:

PUBLISHER:

Journal

English LANGUAGE:

The thermodn. stability of Fe(III) complexes with a new hexadentate tripodal ligand (O-TRENSOX) incorporating three 8-hydroxyquinoline ("oxine") subunits, linked to a tetraamine ("TREN") via an amide connection, has been investigated by the use of UV-vis spectrophotometry and potentiometric methods. O-TRENSOX has been found to form, at pH < 1, a protonated complex FeLH52+ (orange color) which deprotonates, over the pH range 1-2, to a green complex FeLH2- through a four-proton process. The first protonation constant of ferric O-TRENSOX has been determined to be 5.60. The stability constant log  $\beta 110$  has been determined to be 30.9. A pFe (pFe = -log [Fe3+]) value of 29.5 has been calculated at pH = 7.4, [ligand] tot = 10  $\mu$ M,  $\alpha \nu \delta$  [Fe3+] tot = 1  $\mu$ M, indicating that O-TRENSOX is one of the most powerful among the iron synthetic chelators. Cyclic voltammetry expts. have shown that the system FeIII-O-TRENSOX/FeII-O-TRENSOX is quasi reversible, with a redox potential of 0.087 V vs NHE. This value is related to the high complexing ability of O-TRENSOX for both the ferric and ferrous iron redox states, making it relevant for biol. uses. The kinetics of formation and acid hydrolysis of the ferric O-TRENSOX complex have been investigated in acidic medium using the diode array stopped-flow spectrophotometry technique in 2.0  $\ensuremath{\text{M}}$ NaClO4/HClO4 at 25 °. The determining step for the complex formation involves the reaction of FeOH2+ with the LH7+ ligand species, with a rate constant of 789  $\pm$  17 M-1 s-1. The acid hydrolysis of the FeLH2- complex in 0.02-1.0 M HClO4 and ionic strength 2.0 M NaClO4/HClO4 leads to the FeLH52+ complex, indicating that O-TRENSOX is a very strong chelating agent for Fe(III) in acidic medium. The kinetic data have been interpreted by a stepwise mechanism related to the successive protonation of four binding sites. The spectroscopic change is consistent with removal of one arm of the ligand followed by a shift from a bis(oxinate) to a bis(salicylate) mode of coordination.

169209-68-1, O-TRENSOX TT

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent) (thermodn. and kinetic studies of tripodal iron chelator TRENSOX based on hydroxyquinoline subunits)

169209-68-1 CA RN

5-Quinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-CN ethanediyliminocarbonyl)]tris[8-hydroxy-, trisodium salt (CA INDEX NAME)

OH OH CH2 SO3H

$$CH_2$$
 SO3H

 $CH_2$  SO3H

 $CH_2$  SO3H

 $CH_2$  SO3H

●3 Na

REFERENCE COUNT:

54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 38 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

126:305526 CA

TITLE:

Synthesis of indolylalkoxyiminoalkylcarboxylates as

leukotriene biosynthesis inhibitors

AUTHOR(S):

Kolasa, Teodozyj; Bhatia, Pramila; Brooks, Clint D.

W.; Hulkower, Keren I.; Bouska, Jennifer B.; Harris,

Richard R.; Bell, Randy L.

CORPORATE SOURCE:

Immunoscience Research, D-47K, Abbott Laboratories,

100 Abbott Park, IL, 60064-3500, USA

SOURCE:

Bioorganic & Medicinal Chemistry (1997),

5(3), 507-514

Ι

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: DOCUMENT TYPE: Elsevier Journal

LANGUAGE:

English

GΙ

AB A series of substituted indolylalkoxyiminoalkylcarboxylates, e.g., I (R1 = 2-quinolinyl, 2-pyridyl, 4-thiazolyl, 2-benzothiazolyl, R2 = CH2ON:CHCO2H, CH2ON:CMeCO2H), were found to be potent leukotriene biosynthesis inhibitors. The structure-activity relationships were investigated. Representative potent inhibitors identified were the quinolyl I (R1 = 2-quinolinyl, R2 = CH2ON:CHCO2H) (A-86885) and pyridyl I (R1 = 2-pyridyl, R2 = R2 = CH2ON:CHCO2H) (A-86886) congeners with in vitro IC50s of 21 and 9 nM and in vivo leukotriene inhibition in the rat with oral ED50s of 0.9 and 1.7 mg/kg, resp.

IT 168018-36-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and leukotriene biosynthesis inhibitory activity of indolyliminoacetic and -propionic acid derivs. and structure activity)

RN 168018-36-8 CA

CN 1H-Indole-2-carboxylic acid, 1-[(4-chlorophenyl)methyl]-5-(2-quinolinylmethoxy)-3-[(2-quinolinylmethyl)thio]-, ethyl ester (CA INDEX NAME)

L23 ANSWER 39 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

126:277402 CA

TITLE:

New 4-aryl-3-aralkoxypiperidines and -azabicylooctanes

for treating heart and kidney insufficiency

INVENTOR(S):

Binggeli, Alfred; Breu, Volker; Bur, Daniel; Fischli,

Walter; Gueller, Rolf; Hirth, Georges; Maerki, Hans-Peter; Mueller, Marcel; Oefner, Christian;

Stadler, Heinz; Vieira, Eric; Wilhelm, Maurice; Wostl,

Wolfgang

PATENT ASSIGNEE(S):

F. Hoffmann-La Roche Ag, Switz.

SOURCE:

PCT Int. Appl., 492 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	KIND DATE			A	APPLICATION NO.						DATE						
WO	9709311 W: AU, RW: AT,	BR, BE,	CA,	A1 CN, DE,	CZ DK	1997 , HU, , ES,	70313 IL, FI,	JP, FR,	O : KR ; GB ;	1996- , MX, , GR,	EP38 NO, IE,	NZ, IT,	PL, LU,	RU MC	19960 , SG, , NL,	829 TR PT,	<
TNT	1006M701	126		7\		2005	10304	т.	N .	1996-	MA14	26			19960	813	
CA	2230931			A1		1997	70313	C.	A :	1996-	2230	931			19960	829	<
AU	9667432			Α		1997	70327	A	U :	1996-	6743	2			19960	829	<
AU	2230931 9667432 708616 863875 863875			B2		1999	90805										
EP	863875			A1	•	1998	30916	E	Р:	1996-	9277	15			19960	829	<
EP	863875			В1		2003	30604										
	R: AT, IE,	BE, FI	CH,	DE,	DK	, ES,	FR,	GB,	GR.	, IT,	ьł,	LU,	NL,	SE	, мс,	Ρ1,	
CN	1202152 11500447 3648251			A		1998	31216	С	N :	1996-	1976	74			19960	829	<
JP	11500447			т		1999	90112	J	<b>P</b> :	1997-	5108	337			19960	829	<
JP	3648251			B2		2005	50518										
BR	9610385			Α		1999	90706	В	R :	1996-	1038	35			19960	829	<
HÜ	9900926			A2		1999	90706 90928	Н	U :	1999-	926		•		19960	829	<
HU	9900926			<b>A</b> 3		2002	21228										
NZ	315677			A A2 A3 A		2000	00228 L0527	N	Z	1996-	3156	577			19960	829	<
RU	2167865			C2		200	10527	R	U :	1998-	1063	888			19960	829	<
	242213			T			30615	A	T :	1996-	9277	715			19960	829	
IL	123293			Α		2003	30624	I	L :	1996-	1232	293			19960	829	
	292327			B6		2003	30917 31031 40316	C	Z	1998-	684				19960	829	
	863875			T T3 B1 A B		2003	31031	P	T :	1996-	9277	715			19960	829	
ES	2201192			Т3		2004	10316	. E	S	1996-	9277	715			19960	829	
PL	193686			В1		200	70330	P	L	1996-	3254	125			19960	1829	
ZA	9607424			Α		199	70307		Α	1996-	7424	l .			19960	902	<
	474932					2002	20201	T	W	1996-	8511	L0684					
NO	9800954			Α		1998	30428	N	0	1998-	954				19980	305	<
ИО	310069			В1		200	10514										
US	6051712			Α		2000	00418	Ü	S	1999-	2551	L85			19990	222	<
						2000	50901	H	K	1999- 1999- 1995- 1996-	1012	299			19990	330	
	6150526					2000	01121	υ	S	1999-	4562	283			19991	.207	<
	Y APPLN.							C	Ή	1995-	2548	3		A	19950	907	
								C	Ή	1996-	1876	5		Α	19960	726	
							-	W	O	1996-	EP38	303		W	19960	1829	
								U	S	1996-	7113	339		<b>A</b> 3	19960	906	
								U	S	1999-	2551	185		A1	19990	222	

OTHER SOURCE(S): MARPAT 126:277402

GΙ

New piperidine and azabicyclooctane derivs. (> 1000 compds.) are renin inhibitors for treatment of high blood pressure, heart and kidney insufficiency. Thus, the piperidine derivative I was prepared from 1-benzyl-3-propyl-4-piperidinone by reaction with 4-FC6H4Br, followed by 1-benzyloxy-3-chloromethylnaphthalene and deblocking. I had a renin-inhibiting IC50 of 0.317  $\mu M$ .

Ι

IT 188874-62-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of piperidine and azabicyclooctane derivs. as renin inhibitors)

RN 188874-62-6 CA
CN 1-Piperidinecarboxylic acid, 4-[4-[3-(phenylmethoxy)propoxy]phenyl]-3,5bis(7-quinolinylmethoxy)-, 1,1-dimethylethyl ester,
 (3α,4β,5α)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L23 ANSWER 40 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

126:209228 CA

TITLE:

Nanogram-scale derivatization of hydroxy groups for

highly sensitive HPLC/MS/CD detection

AUTHOR (S):

Zhao, Ning; Guo, Jin-Song; Lo, Lee-Chiang; Berova, Nina; Nakanishi, Koji; Haupert, Garner T.; Warrack,

M.; Tymiak, Adrienne A.

CORPORATE SOURCE:

Dep. Chem., Columbia Univ., New York, NY, 10027, USA

Chemical Communications (Cambridge) (1997),

(1), 43-44

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER:

SOURCE:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

A strategy for performing submicrogram-scale structural studies of saponins and related compds. is worked out by: (i) naphthoylation to sensitize HPLC detection by fluorescence as well as configurational studies by exciton coupled CD; and (ii) ω-cyanoundecanoylation to increase LC/MS sensitivity (.apprx.100-fold).

188055-77-8P IT

RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

(nanogram-scale derivatization of hydroxy groups for highly sensitive HPLC/MS/CD detection)

188055-77-8 CA RN

Card-20(22)-enolide, 5,11,14-trihydroxy-1,3,19-tris[(2-CN quinolinylcarbonyl)oxy]-,  $(1\beta, 3\beta, 5\beta, 11\alpha)$ - (9CI) (CA) INDEX NAME)

Absolute stereochemistry.

6

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L23 ANSWER 41 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

126:19338 CA

TITLE: INVENTOR(S): Preparation of glycopeptide antibiotic derivatives Cooper, Robin D. G.; Huff, Bret E.; Nicas, Thalia I.; Quatroche, John T.; Rodriguez, Michael J.; Snyder, Nancy J.; Staszak, Michael A.; Thompson, Richard C.;

Wilkie, Stephen C.; Zweifel, Mark J.

PATENT ASSIGNEE(S):

Eli Lilly and Co., USA PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

						ND DATE APPLICATION NO.						DATE							
	WO		401			Al													
		W:	AL,	AM,	AT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
			ES,	FI,	GB,	GE,	HU,	IS,	JP,	KE,	KG,	ΚP,	KR,	KΖ,	LK,	LR,	LS,	LT,	
									MW,										
			SG,			•	•	•	•										
		RW:	KE,		MW.	SD.	SZ,	ΰĠ.	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
			TE.	TT.	LII.	MC.	NI.	PT.	SE,	BF.	ВJ.	CF.	CG,	CI,	CM,	GA,	GN		
	IIS	5840	684	,	_0,	Α,	,	1998	1124	,	US 1	995-	4101	55	•	1:	9950	324	<
			167					1996	1003		CA 1	996-	2216	167		1:	9960	314	<
			167								··· -			_ • ·					
	TI	2210	121			7		1006	1016		ז ז ז <b>ז</b>	996-	5312	1		1	9960	314	<
	AU	2023	97			7.7		1000	0114		ED 1	996	9097	12		1	9960	314	
											Pb 1	990-	3031	13		4.		J,1-4	`
	EP		97						1227		an.	7 m		NIT	CE	ייים	TE	ਦਾ	
			AT,								GR,	TT,	DТ,	ГИЪ,	SE,	P1,	TE,	214	_
	JР	1150	2534			Т		1999	0302					55					<
PRIO	RIT	Y APE	LN.	INFO	. :									55					
														93			9940		
														13			9941		
											WO 1	996-	US35	50	1	W 1	9960	314	
$\triangle$ TUE	D C	אווס מינו	1/01.			MAD	דעס	126.	1933	R									

OTHER SOURCE(S): MARPAT 126:19338

GI

The present invention provides glycopeptide antibiotic derivative compds. [I; AB X = H, C1; R = N-R7a-(un) substituted 4-epivancosaminyl; R2 = NMeR7b; R6 =N-R7-(un) substituted 4-epivancosaminyl; R7, R7a, R7b = H, C2-16 alkenyl, C2-12 alkynyl, C1-12 alkyl-R8, C1-12 haloalkyl, C2-6 alkenyl-R8, C2-6 alkynyl-R8, C1-12 alkoxy-R8; provided that R7 = R7a = R7b  $\neq$  H; R8 = (un) substituted multicyclic aryl, heteroaryl, Ph, or C4-10 cycloalkyl, etc.]. These derivative compds. possess antibacterial activity against a wide variety of bacteria, including activity against vancomycin-resistant isolates. In general, I were prepared by reductive alkylation of the glycopeptide A82846B, i.e. I (R = R1 = 4-epivancosaminyl, R2 = R6 = H, R4 = CH2CHMe2, CH2CONH2, X = Y = Cl), with aldehydes. I [R = R1 =N-(4-nitrobenzyl)-4-epivancosaminyl, R2 = R6 = H, R4 = CH2CHMe2, CH2CONH2,X = Y = C1] showed min. inhibitory concentration of  $\leq 0.06$ ,  $\leq 0.06$ ,  $\leq$ 0.06, and 0.5  $\mu$ g/mL against Staphylococcus aureus 446, Enterococcus faecalis 276, E. gallinarum 245, and Escherichia coli EC14, resp. Tablets containing 200 mg I.HCl [R = 4-epivancosaminyl, R1 = N-[4-(4-chlorophenyl)benzyl]-4-epivancosaminyl, R2 = R6 = H, R4 =CH2CHMe2, CH2CONH2, X = Y = C1] were formulated. IT 183669-66-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of glycopeptide antibiotic derivs. as antibacterial agents) 183669-66-1 CA RN Vancomycin, N3''-(3-quinolinylmethyl)-22-0-[2,3,6-trideoxy-3-C-methyl-3-CN

[(3-quinolinylmethyl)amino]- $\alpha$ -L-arabino-hexopyranosyl]-, (4''R)-

Ι

Absolute stereochemistry.

(9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

Cl\_

PAGE 2-B

L23 ANSWER 42 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 124:343079 CA

TITLE: Synthesis and NMR study of two lipophilic iron(III)

sequestering agents based on 8-hydroxyquinoline;

H-bonding and conformational changes

AUTHOR(S): Caris, Catherine; Baret, Paul; Pierre, Jean-Louis;

Serratrice, Guy

CORPORATE SOURCE: Lab. Chimie Biomimetique, Univ. Joseph Fourier,

Grenoble, 38041, Fr.

SOURCE: Tetrahedron (1996), 52(13), 4659-72

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 124:343079

The synthesis of two tripodal iron chelating agents based on 8-hydroxyquinoline is described. The ligands consist of tris(2-aminoethylamine) (spacer) linked in 2- or 7-position to three 8-hydroxyquinoline units (allowing the complexation of iron). NMR study of these ligands in DMSO-d6 solns. evidence intramol. H-bond networks inducing conformational changes in relation to the protonation state of the tertiary amine.

IT 169209-67-0P, O-Trenox

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and NMR study of two lipophilic iron(III) sequestering agents based on 8-hydroxyquinoline)

RN 169209-67-0 CA

CN 7-Quinolinecarboxamide, N,N',N''-(nitrilotri-2,1-ethanediyl)tris[8-hydroxy-(9CI) (CA INDEX NAME)

L23 ANSWER 43 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

124:246404 CA

TITLE:

Electrophotographic photoreceptor containing disazo

pigment as charge-generating agent

INVENTOR(S):

Hanatani, Yasuyuki; Kimoto, Keizo; Iwasaki, Hiroaki;

Sakai, Hirosuke; Tanaka, Tomoki; Sugase, Ayako

PATENT ASSIGNEE(S):

Mita Industrial Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 19 pp.

SOURCE: CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07325416 PRIORITY APPLN. INFO.:	<b>A</b>	19951212	JP 1994-118727 JP 1994-118727	19940531 < 19940531
CT				•

The photoreceptor contains a hindered-amine-having disazo pigment I (Ar = AB 2-4-valent aromatic linking group; R1 = H, alkyl, aryl; R2 = alkyl, aryl; X = organic residue to form aromatic carbocycle or heterocycle with benzene ring; n = 2-4; m = 1-3) as a charge-generating agent. The photoreceptor shows high sensitivity and repeating durability.

174898-17-0 IT

RL: DEV (Device component use); USES (Uses) (charge-generating agent; electrophotog. photoreceptor containing disazo pigment as charge-generating agent)

174898-17-0 CA RN

1,3,8-Triazaspiro[4.5]decane, 8,8'-[[2-oxo-5-(4-oxo-2,5-cyclohexadien-1-CN ylidene) -3,5-cyclohexadiene-1,3-diyl]bis[azo(3-hydroxy-4,2quinolinediyl)(1-oxo-2,1-ethanediyl)]]bis[7,7,9,9-tetramethyl-3-octyl-(9CI) (CA INDEX NAME)

PAGE 2-A

OH Me H N 
$$CH_2$$
  $CH_2$   $CH_2$   $O$  Me Me  $(CH_2)_7$   $CH_2$ 

L23 ANSWER 44 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

123:314386 CA

TITLE:

SOURCE:

Glycyrrhizic acid triamide with 3-aminoquinoline with

antidepressant activity

INVENTOR(S):

Baltina, L. A.; Tolstikova, T. G.; Popov, V. G.; Davydova, V. A.; Zarudij, F. A.; Tolstikov, G. A.

Institut Khimii Bashkirskogo Nauchnogo Tsentra

PATENT ASSIGNEE(S): Institut Khimii Bashkirskogo Nauchnog Uralskogo Otdeleniya AN SSSR, Russia

U.S.S.R. From: Izobreteniya 1994, (11), 185.

CODEN: URXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Russian

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1764302	A1	19940615	SU 1990-4902355	19901126 <
PRIORITY APPLN. INFO.:			SU 1990-4902355	19901126
	_			

AB Title only translated.

IT 170277-51-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antidepressant glycyrrhizic acid triamide with aminoquinoline)

RN 170277-51-7 CA

CN  $\alpha$ -D-Glucopyranosiduronamide,  $(3\beta,20\beta)$ -11,29-dioxo-29-(3-quinolinylamino)olean-12-en-3-yl N-3-quinolinyl-2-O-(N-3-quinolinyl- $\beta$ -D-glucopyranuronamidosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

\_OH

OH

Me

PAGE 2-A

Page 240

L23 ANSWER 45 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

123:267822 CA

TITLE:

O-TRENSOX: A Promising Water-Soluble Iron Chelator (Both FeIII and FeII) Potentially Suitable for Plant

Nutrition and Iron Chelation Therapy

AUTHOR (S):

Baret, Paul; Beguin, Claude G.; Boukhalfa, H.; Caris, Catherine; Laulhere, Jean-Pierre; Pierre, Jean-Louis;

Serratrice, Guy

CORPORATE SOURCE:

Laboratoire d'Etudes Dynamiques et Structurales de la Selectivite, Universite J. Fourier, Grenoble, 38041,

Ι

SOURCE:

Journal of the American Chemical Society (1995

), 117(38), 9760-1

CODEN: JACSAT; ISSN: 0002-7863

American Chemical Society

DOCUMENT TYPE:

Journal .

PUBLISHER: LANGUAGE:

English

GI

A synthetic siderophore, O-TRENSOX (I), was designed; the affinity for Fe, AB in both oxidation states (III) and (II), of this ligand is very high (pFeIII = 29.5 and pFeII = 17.9). The ferric complex of O-TRENSOX is able to prevent and to reverse Fe chlorosis in several plant species. This complex is not photoreducible and does not induce radical damages under Fenton conditions. The free ligand exhibits promising properties for Fe chelation therapy.

169209-67-0P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(for preparation of tris(hydroxy(sulfonyl)quinolinylcarboxamidoethyl)amine)

169209-67-0 CA RN

7-Quinolinecarboxamide, N,N',N''-(nitrilotri-2,1-ethanediyl)tris[8-hydroxy-CN (CA INDEX NAME) (9CI)

L23 ANSWER 46 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

123:256541 CA

TITLE:

Preparation of 8-hydroxyquinoline-containing iron

chelants for plant nutrition

INVENTOR (S):

Baret, Paul; Caris, Catherine; Laulhere, Jean-Pierre;

Pierre, Jean-Louis

PATENT ASSIGNEE(S):

Centre National de la Recherche Scientifique, Fr.

SOURCE:

PCT Int. Appl., 43 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	ENT 1	NO.			KINI	DATE			ICATION			ATE	
	 WO	9512	 580	<del>-</del>		A1	1995	0511		 994-FR12			994101	- 7 <
		W: RW:			CH,	DE,	DK, ES,	FR,	GB, GR,	IE, IT,	LU, MC	, NL,	PT, S	E
	FR	27119	991			A1	1995	0512	FR 19	993-1331	.0	1	993110	3 <
	FR	2711	991			Bl	1995	1222						
DR	ITY	APP	LN.	INFC	).:				FR 19	993-1331	. 0	A 1	993110	3

PRIOF

OTHER SOURCE(S): MARPAT 123:256541

R1Z1(R1Z2)Z(ZrR1)n-2 [R1 = quinolyl group Q; R = H or a hydroxy-protective group; R2-R6 = H, halo, alkyl, etc.; Z = a saturated or unsatd., cyclic or aliphatic, linear or branched hydrocarbon group optionally polyfunctionalized by functions selected from secondary amine, tertiary amine, imine and oxy functions; Z1, Z2 < ... Zr = CH, CH2, CO, N, NH; n = 2-4] were prepared Thus, 8-hydroxyquinoline was carboxylated and the product used to amidate N(CH2CH2NH2)3 after which the product was treated with oleum to give N(CH2CH2NHR1)3 (R1 = Q in which R,R2-R5,R6 = H, R5 = SO3H) which was used to prepare in Fe complex. Data for biol. use of said complexes were given in graphic form.

169209-69-2DP, Iron complex TΨ

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 8-hydroxyquinoline-containing iron chelants for plant

nutrition) 169209-69-2 CA RN

5-Ouinolinesulfonic acid, 7,7',7''-[nitrilotris(2,1-CN ethanediyliminocarbonyl)]tris[8-hydroxy- (9CI) (CA INDEX NAME)

L23 ANSWER 47 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 123:227986 CA

TITLE: Indole iminooxy derivatives which inhibit leukotriene

biosynthesis

INVENTOR(S): Kolasa, Teodozyi; Bhatia, Pramila; Brooks, Dee W.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: U.S., 13 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: Facence English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5399699	Α	19950321	US 1994-186410	19940124 <
ZA 9500555	Α	19960206	ZA 1995-555	19950124 <
PRIORITY APPLN. INFO.:			US 1994-186410	A 19940124
OTHER SOURCE(S):	MARPAT	123:227,986		
GI			•	

$$R^{1}$$

$$R^{3}$$

$$N_{R^{2}}$$

$$R^{4}$$

$$R^{4}$$

$$\begin{array}{c|c} \text{SBu-tert} \\ \text{CH}_2\text{CMe}_2\text{CH}_2\text{ON} = \text{CHCO}_2\text{H} \\ \\ \text{CH}_2 & \text{C1} \end{array}$$

Compds. of the structure I where Al is alkylene or cycloalkylene; A2 is a AΒ valence bond, alkylene, or cycloalkylene; R1 is selected from hydrogen, alkylthio, optionally substituted phenylthio, optionally substituted phenylalkylthio, optionally substituted 2-, 3- and 4-pyridylthio, optionally substituted 2- and 3-thienylthio, and optionally substituted 2-thiazolylthio; R2 is selected from optionally substituted phenylalkyl and optionally substituted heteroarylakyl; R3 is selected from alkyl, alkoxy, optionally substituted Ph, optionally substituted phenoxy, optionally substituted phenylalkyl, optionally substituted phenylalkoxy, optionally substituted naphthyl, optionally substituted naphthyloxy, optionally substituted naphthylalkyl, optionally substituted naphthylalkoxy, optionally substituted heteroaryl, optionally substituted heteroaryloxy, optionally substituted heteroarylalkyl, and optionally substituted heteroarylalkoxy; R4 is selected from hydrogen and optionally substituted alkyl; and Z is selected from COOB, C(OB)R6R6, COOalkyl, COOalkylaryl, CONR5R6, and COR6 are potent inhibitors of lipoxygenase enzymes and thus inhibit the biosynthesis of leukotrienes. These compds. are useful in the treatment or amelioration of allergic and inflammatory disease states. Thus, e.g., reaction of 4-methoxyphenylhydrazine

hydrochloride with 4-chlorobenzyl chloride afforded 1-(4-chlorobenzyl)-1-(4-methoxyphenyl)hydrazine; Fisher-indole reaction of the latter with tert-BuSCH2COCH2CMe2CO2Et afforded Et 3-[1-(4-chlorobenzyl)-3-(t-butylthio)-5-methoxyindol-2-yl]-2,2-dimethylpropionate which was demethylated to the 5-OH and subsequently the 5-(2-quinolinemethoxy) derivs.; reduction of the latter to 3-[1-(4-chlorobenzyl)-3-(t-butylthio)-5-(2-quinolinemethoxy)indol-2-yl]-2,2-dimethylpropan-1-ol followed by reaction with N-hydroxyphthalimide under standard Mitsunobu reaction conditions provides the N-phthaloyl intermediate which was deprotected with hydrazine hydrate to provide the O-substituted hydroxylamine; reaction of the latter with glyoxylic acid afforded indole iminooxy derivative II. II inhibited LTB4 biosynthesis in vitro in human polymorphonuclear leukocytes with IC50 = 0.010  $\mu$ M; II inhibited leukotriene biosynthesis in vivo with an ED50 of 0.90 mg/kg.

IT 168018-36-8P

RL: BYP (Byproduct); PREP (Preparation)
 (indole iminooxy derivs. which inhibit leukotriene biosynthesis)
168018-36-8 CA

RN 168018-36-8 CA
CN 1H-Indole-2-carboxylic acid, 1-[(4-chlorophenyl)methyl]-5-(2-quinolinylmethoxy)-3-[(2-quinolinylmethyl)thio]-, ethyl ester (CA INDEX NAME)

L23 ANSWER 48 OF 128 CA COPYRIGHT 2007 ACS on STN

121:231363 CA ACCESSION NUMBER:

Preparation of antiretroviral amino acid derivatives TITLE:

Bold, Guido; Faessler, Alexander; Lang, Marc INVENTOR(S):

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 57 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		DATE	APPLICATION NO.	DATE
		10040407	ED 1003 010724	19931014 <
			EP 1993-810724	19931014 2
EP 594540				
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI, LU,	MC, NL, PT, SE
AT 164592			AT 1993-810724	
AU 9349072	Α	19940505	AU 1993-49072	19931018 <
AU 670121	B2	19960704		
FI 9304634	Α	19940424	FI 1993-4634	19931020 <
CA 2108934	A1	19940424	CA 1993-2108934	19931021 <
IL 107356	A	19980104	IL 1993-107356	19931021 <
NO 9303816	Α	19940425	NO 1993-3816	19931022 <
ZA 9307859		19940425		19931022 <
CN 1089606	A	19940720	CN 1993-118762	19931022 <
HU 65876	A2	19940728	HU 1993-3011	19931022 <
HU 214330	В	19980302	•	
PL 173529	B1	19980331	PL 1993-300829	19931022 <
JP 06228132	Α	19940816	JP 1993-266170	19931025 <
PRIORITY APPLN. INFO.:			CH 1992-3312	A 19921023
OTHER SOURCE(S):	CASREA	CT 121:23	1363; MARPAT 121:231363	
GI				

$$O = C$$

$$O =$$

The title compound [I; R1 = acyl] and their salts, useful as antiretrovirals AB (no data), are prepared E.g., 2(S)-[1(S)-(tert-butoxycarbonylamino)-2phenylethyl]oxirane was reacted with (S,S,S)-N-tertbutyldecahydroisoquinolinecarboxamide in EtOH at 90° for 16 h gt N-tert-butyldecahydro-2-[2(R)-hydroxy-4-phenyl-3(S)-[tertbutoxycarbonylamino]butyl]-(4aS,8aS)-isoquinoline-3(S)-carboxamide, which

Ι

was treated with HCl in dioxane to give N-tert-butyldecahydro-2-[2(R)hydroxy-4-phenyl-3(S)-aminobutyl]-(4aS,8aS)-isoquinoline-3(S)carboxamide.HCl, which was reacted with Z-Asn-O-PNP (PNP = p-nitrophenyl)
in DMF containing N-methylmorpholine and N-ethyldiisopropylamine at room
temperature

for 4 h to give N-tert-butyldecahydro-2-[2(R)-hydroxy-4-phenyl-3(S)-[[N-benzyloxycarbonyl-L-asparaginyl]amino]butyl]-(4aS,8aS)-isoquinoline-3(S)-carboxamide, which was hydrogenolyzed over Pd/C at room temperature for 5 h to give N-tert-butyldecahydro-2-[2(R)-hydroxy-4-phenyl-3(S)-(L-asparaginylaminobutyl)](4aS,8aS)-isoquinoline-3(S)-carboxamide, which was condensed with quinaldic acid in DMF containing N-methylmorpholine, HOBt, and 1H-benzotriazol-1-yloxytris(dimethylamino)phosphonium hexafluorophosphate to give N-tert-butyldecahydro-2-[2(R)-hydroxy-4-phenyl-3(S)-[[N-(2-quinolinylcarbonyl)-L-asparaginyl]amino]butyl]-(4aS,8aS)-isoquinoline-3(S)-carboxamide, which was acetylated with Ac2O to give I [R1 = Ac]. Formulations containing I are described.

IT 158220-47-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as antiretroviral)

RN 158220-47-4 CA

CN 2-Quinolinecarboxylic acid, 2-[[4-amino-1,4-dioxo-2-[(2-quinolinylcarbonyl)amino]butyl]amino]-1-[[3-[[(1,1-dimethylethyl)amino]carbonyl]octahydro-2(1H)-isoquinolinyl]methyl]-3-phenylpropyl ester, [3S-[2[1S\*,2R\*(R\*)],3α,4aβ,8aβ]](9CI) (CA INDEX NAME)

Absolute stereochemistry.

L23 ANSWER 49 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 121:205395 CA

TITLE: Pyrido[2,3-d]pyrimidines and their use as endothelin

antagonists

INVENTOR(S): Furuya, Shuichi; Ohtaki, Tetsuya

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Eur. Pat. Appl., 79 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					DATE		A	APPLICATION NO.						DATE			
				-													
EP	608565			A1		1994	0803	E	P ]	L993-	1210	04			19931	228	<
EP	608565			B1		2002	0313										
	R: AT,	BE,	CH,	DE,	DK	, ES,	FR,	GB,	GR,	IE,	ΙT,	LI,	LU,	NL	, PT,	SE	
CA	2112425			A1			0630			L993-					19931		<
JP	07173161	L		A		1995	0711	J	P 1	L993-	3331	46			19931	227	<
JP	3481984			B2		2003	1222										
FI	9305897			A		1994	0630	F	I I	1993-	5897				19931	228	<
NO	9304866			A		1994	0630	N	0 1	1993-	4866				19931	228	<
HU	66159			A2		1994	0928	H	U I	1993-	3774		4		19931	228	<
HU	218782			В		2000	1228										
RU	2127734			C1		1999	0320	R	U I	1993-	5684	6			19931	228	<
AT	214391			Т		2002	0315	A	T :	1993-	1210	04			19931	228	<
CN	1094045			A		1994	1026	С	N :	1993-	1215	06			19931	229	<
CN	1041090			В		1998	1209										
US	5654309			A		1997	0805	υ	S :	1995-	4808	62			19950	607	<
PRIORIT	Y APPLN.	INFO.	:					J	P :	1992-	3603	84		Α	19921	229	
								J	P :	1993-	2771	36		Α	19931	105	
						٠.		U	S :	1993-	1751	07		В1	19931	.229	
						_											

OTHER SOURCE(S):

MARPAT 121:205395

GI

$$R^{20}$$
 $R^{20}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{1}$ 
 $R^{5}$ 
 $R^{1}$ 
 $R^{1}$ 
 $R^{20}$ 
 $R^{1}$ 
 $R^{20}$ 
 $R^{1}$ 
 $R^{20}$ 
 $R^{1}$ 
 $R^{20}$ 
 $R^{1}$ 
 $R^{20}$ 
 $R^$ 

AB Pyrido[2,3-d]pyrimidines I (R1, R2 = H, alkyl,e tc.; R3 = cyclic group; R4, R5 = H, alkyl, etc.; Q = alkanediyl; oxygen, SO, etc; n = integer) were disclosed. I are endothelin receptor antagonists. An endothelin receptor antagonists consisting of I are useful for the treatment of acute renal insufficiency, myocardial infarction, hypertension, cerebral

infarction, angina pectoris, arteriosclerosis, hepatopathy, pulmonary hypertension, bronchial asthma, organ hyperfunction occurring during operation or transplantation or organs. A specifically claimed example compound is the pyrido[2,3-d]pyrimidine-3-acetic acid II.

IT 157926-17-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as endothelin antagonist)

RN 157926-17-5 CA

CN Pyrido[2,3-d]pyrimidine-3(2H)-acetic acid, 6-(ethoxycarbonyl)-1,4-dihydro-7-(1-methylethyl)-2,4-dioxo-5-(2-quinolinyl)-1-(2-quinolinylmethyl)-, ethyl ester (CA INDEX NAME)

L23 ANSWER 50 OF 128 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

121:9130 CA

TITLE:

Complexation of acyclic ligands having two terminal

quinoline units with alkali metal cations

AUTHOR (S):

Sugimoto, Masakatsu; Fujiwara, Kazuhiko; Wakita,

Ryuhei; Kida, Toshiyuki; Masuyama, Araki; Nakatsuji,

Yohji; Okahara, Mitsuo

CORPORATE SOURCE:

Fac. Eng., Osaka Univ., Suita, 565, Japan Supramolecular Chemistry (1993), 2(2-3),

145-51

CODEN: SCHEER; ISSN: 1061-0278

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

Ι

GΙ

$$N$$
 $CO_2Me$ 
 $MeO_2C$ 

AB Acyclic multidentate ligands [I, n = 1, 2, 3, 4] consisting of an oligooxyethylene chain (di-, tri-, tetra-, and penta-) and two terminal rigid quinaldate end groups were newly prepared and their complexation properties with alkali metal cations were estimated by the solvent extraction method to indicate a better affinity for K+. Among them, the tetraethylene glycol derivative showed the highest K+ binding on about the same level as 18-crown-6. Their conformations in solution and in the solid state were examined by using 1H- and 13C-NMR spectroscopy and x-ray crystal analyses, resp. The better binding of K+ in comparison with the corresponding glymes of analogs having the same donor sites was reasonably explained by considering the effective coordination of the carbonyl oxygen of the ester groups and the parallel  $\pi$ -stacking interaction between two quinaldate surfaces.

IT 155527-44-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and extraction by, of alkali metal cations)

RN 155527-44-9 CA

CN Morpholine, 4,4'-[oxybis(2,1-ethanediyloxy-8,2-quinolinediylcarbonyl)]bis(9CI) (CA INDEX NAME)

```
10/773803
```

# => d his

```
(FILE 'HOME' ENTERED AT 11:17:54 ON 14 NOV 2007)
```

```
FILE 'REGISTRY' ENTERED AT 11:18:05 ON 14 NOV 2007
                STRUCTURE UPLOADED
L1
         398380 S QUINOLINE
Ļ2
        3265689 S 591/RID
L3
                STRUCTURE UPLOADED
L4
                STRUCTURE UPLOADED
L5
             43 S L1 SUB=L3 SAM
L6
            738 S L1 FULL SUB=L3
L7
     FILE 'CA' ENTERED AT 11:21:11 ON 14 NOV 2007
            221 S L7
^{\text{L8}}
             6 S L8 AND TELOMERAS?
L9
            215 S L8 NOT L9
L10
        1075287 S DNA? OR RNA?
L11
             15 S L11 AND L10
L12
            200 S L10 NOT L12
L13
L14
             2 S CANCER? AND L13
            198 S L13 NOT L14
L15
L16
            22 S L15 AND PHARM?
            176 S L15 NOT L16
L17
             0 S L17 AND QUADRUP?
5 S L17 AND DRUG?
L18
L19
            171 S L17 NOT L19
L20
             12 S L20 AND HELICA?
L21
            159 S L20 NOT L21
L22
L23 ·
           128 S L22 AND PY<2003
```

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

=>

STN INTERNATIONAL LOGOFF AT 11:27:12 ON 14 NOV 2007